

2021

## **Feed-forward: Using annotated exemplars to promote student engagement and satisfaction**

Rebekah Carter

Follow this and additional works at: <https://ro.uow.edu.au/theses1>

**University of Wollongong**

**Copyright Warning**

You may print or download ONE copy of this document for the purpose of your own research or study. The University does not authorise you to copy, communicate or otherwise make available electronically to any other person any copyright material contained on this site.

You are reminded of the following: This work is copyright. Apart from any use permitted under the Copyright Act 1968, no part of this work may be reproduced by any process, nor may any other exclusive right be exercised, without the permission of the author. Copyright owners are entitled to take legal action against persons who infringe their copyright. A reproduction of material that is protected by copyright may be a copyright infringement. A court may impose penalties and award damages in relation to offences and infringements relating to copyright material.

Higher penalties may apply, and higher damages may be awarded, for offences and infringements involving the conversion of material into digital or electronic form.

Unless otherwise indicated, the views expressed in this thesis are those of the author and do not necessarily represent the views of the University of Wollongong.

---

Research Online is the open access institutional repository for the University of Wollongong. For further information contact the UOW Library: [research-pubs@uow.edu.au](mailto:research-pubs@uow.edu.au)

# **Feed-forward: Using annotated exemplars to promote student engagement and satisfaction**

**Rebekah Carter**

RN GCHEd, GCertCardNurs, BHlthSc (Nurs) & DipAppSc (Nurs)

A thesis submitted in fulfilment of the requirements for the degree of  
Master of Philosophy



School of Nursing,  
Faculty of Science, Medicine & Health

2021

### **Thesis Certification**

I, *Rebekah Carter*, declare that this thesis, submitted in fulfilment of the requirements for the award of Master of Philosophy, in the School of Nursing, Faculty of Science, Medicine & Health, University of Wollongong, is wholly my own work unless otherwise referenced or acknowledged. This document has not been submitted, either wholly or in part, to any other educational institution.

**Signed:**

—

**Date:** 19/8/2021

**Verification**

This statement verifies that the greater part of the work in the named manuscripts is attributed to the candidate. *Rebekah Carter* conceived and designed the study and undertook data collection and analysis. She prepared the first draft of each of the manuscripts for publication and responded to the editorial comments of co-authors. *Rebekah Carter* prepared articles for submission to the relevant journals and responded to reviewer and editor comments to finalise the manuscripts.

Professor Elizabeth Halcomb  
Principal Supervisor  
School of Nursing, Faculty of Science, Medicine & Health

## **Acknowledgments**

I would like to acknowledge the following people:

My HDR Supervisory team - Prof. Liz Halcomb, Prof. Yenna Salamonson and Assoc. Prof. Lucie Ramjan for their support, guidance, timely feedback, knowledge, flexibility and encouragement.

My parents David and Lyn Carter, for never doubting my ability to achieve my goals and assisting me where they could. We had many a lovely dinner, loving cooked by Mum. We never went hungry!

Niamh and Andy Carter, my children, who gave me the opportunity to role model expected behaviours, supported me when I needed reminding that the effort really was worth it and showing me that students may experience challenges which impact upon their learning, but as an educator, I have the opportunity to help them become more effective learner's and achieve their goals.

Ginny Grant, Sophie Ralston and the team at Reframing Autism for showing me that neurodivergence, specifically Autistic identity is something to be celebrated!

Lastly, but most importantly, I would like to specifically acknowledge the dedication and support provided by Prof. Yenna Salamonson, who in addition to her role on my HDR panel recognised my potential, supported and mentored me, so generously gave up her time for me each week when I really needed it, and during my low times inspired me and reminded me of what I could achieve.

**Abstract****Background**

Assessment is an integral aspect of student learning. There has been a significant shift in focus from assessment of learning to assessment for learning. Although timely and meaningful feedback is essential to promote student learning the delivery of this remains problematic in higher education.

**Aim**

The study aimed to explore the utility and effectiveness of annotated exemplars as an academic support strategy in undergraduate nursing students.

**Methods**

This study used an explanatory, sequential mixed-methods design to collect quantitative and qualitative data about the experiences of second-year nursing students in their use of an annotated exemplar within a single unit of study. Quantitative administrative data, grade information and usage of the annotated exemplar were collected as part of the first phase of this study. Qualitative data were subsequently collected through interviews. Numerical data were analysed using descriptive, bivariate and multivariate logistic regression analyses. Interview data were analysed using thematic analysis.

**Results**

Of the 1120 students enrolled in the unit, approximately half used the annotated exemplar when writing their essay. Those who engaged with the tool were more likely to be female, older, born outside of Australia and had higher hit rates on the online learning management system. Whilst there was no demonstrated improvement in essay marks, two-thirds of students interviewed used the annotated exemplar as a blueprint to structure and/or guide them as they wrote their essay and to check that they were on the right track.

**Conclusion**

Whilst this study found no improvement in student marks through the use of the annotated exemplar, there was substantial qualitative evidence of student engagement and satisfaction with the learning support strategy. Further research needs to focus on building uptake of the tool and engaging both staff and students in implementation.

### Peer-Reviewed Publications

1. Carter, R., Salamonson, Y., Ramjan, L., & Halcomb, E. (2018). Students use of exemplars to support academic writing in higher education: An integrative review. *Nurse Education Today*, 65, 87-95.
2. Carter, R., Halcomb, E. J., Ramjan, L., Wilson, N., Glew, P., & Salamonson, Y. (2019). Does the use of annotated exemplars by nursing students predict academic performance? A cohort study. *Nurse Education Today*, 80, 34-39. <https://doi.org/10.1016/j.nedt.2019.06.003>.
3. Carter, R., Ramjan, L., Halcomb, E. J., Wilson, N., Glew, P., & Salamonson, Y. (2019). "It keeps me on track": Undergraduate nursing students' experiences of using annotated exemplars – A qualitative study. *Nurse Education Today*, under review. (submitted 11/7/2021).

### Presentations

1. Carter, R., Halcomb, E. J., Ramjan, L., Wilson, N., Glew, P., & Salamonson, Y. (2016). *An evaluation of a feed-forward strategy using a web-based annotated exemplar to support students' written assessment (FASTEN Project)*. NET2016. 6-8<sup>th</sup> September, 2016. Churchill College, Cambridge, UK

## Contents

Thesis Certification .....	ii
Verification.....	iii
Acknowledgments .....	iv
Abstract .....	v
Peer-Reviewed Publications.....	vi
Presentations .....	vi
List of Tables .....	xii
List of Figures.....	xiii
Abbreviations.....	xiv
Glossary .....	xv
<b>Chapter 1: Introduction.....</b>	<b>1</b>
Chapter introduction .....	2
Changing landscape of higher education .....	2
Importance of assessment feedback to student learning .....	3
Feedback and academic engagement .....	3
Feedback and academic performance .....	4
Feedback and student satisfaction .....	4
Challenges with traditional approaches of providing assessment feedback...	4
Timeliness of feedback .....	5
Marking for large cohorts .....	5
Problems with transferability .....	5
Lack of comprehensive feedback.....	6
Inconsistency between markers.....	6
A way forward: feed-forward using annotated exemplars.....	6
Aim .....	7
Significance of the study to nursing education .....	8
Thesis structure.....	8
<b>Chapter 2: Literature Review.....</b>	<b>11</b>
Chapter introduction .....	12



Abstract .....	12
Introduction.....	13
The review.....	14
Aim .....	14
Method .....	14
Search strategy .....	14
Search outcome .....	15
Quality appraisal .....	16
Data abstraction & synthesis.....	16
Results .....	17
Methodological features .....	17
Exemplars as a tool for structuring and preparing assessment tasks ....	17
Appraising exemplars provided as a teaching and learning activity .....	23
Impact of exemplar use on academic performance .....	24
Students' satisfaction of exemplars as a learning tool .....	24
Discussion .....	24
Implications and recommendations for nursing education .....	26
Limitations.....	26
Conclusion.....	27
<b>Chapter 3: Methodology and Methods .....</b>	<b>28</b>
Chapter introduction .....	29
Aims .....	29
Mixed-methods research .....	29
Setting & participants .....	30
Exemplar .....	31
Phase 1 Quantitative .....	32
Sampling and recruitment .....	32
Data collection.....	32
Data management and analysis .....	32
Phase 2 Qualitative .....	33

Sampling and recruitment .....	33
Data collection.....	34
Interview guide .....	35
Data collection.....	35
Data analysis.....	36
Rigour.....	36
Ethical considerations .....	37
Informed consent .....	37
Relationships between staff and students.....	38
Confidentiality .....	38
Storage of information.....	38
Conclusion.....	38
<b>Chapter 4:.....</b>	<b>39</b>
<b>Quantitative Findings.....</b>	<b>39</b>
Chapter Introduction.....	40
Abstract.....	40
Introduction.....	41
Background .....	42
Methodology.....	44
Study design .....	44
Population and setting.....	44
Educational intervention.....	44
Data collection .....	45
Data analysis .....	46
Results .....	47
Predictors of engagement with AE .....	48
Predictors of a high essay mark .....	48
Discussion .....	49
Limitations and recommendations for future research .....	51
Conclusion.....	51

<b>Chapter 5:</b>	<b>53</b>
<b>Qualitative Findings</b>	<b>53</b>
Chapter Introduction	54
Abstract	54
Introduction	55
Background	56
Aim	57
Methods	57
Intervention: AE as an academic support tool	57
Study setting	57
Ethical considerations	58
Data collection	60
Data analysis	60
Results	61
‘AE as a blueprint to draft the building plan’	62
‘Drafting with the blueprint’ – provide clarity of expectations	62
‘Staying within the path’	63
‘The blueprint has the final say’	64
‘AE as a scaffold to build structure’	64
‘Structure for choice of terminology, and depth of content’	64
‘Structure for linking concepts and ideas and supporting with evidence’	65
‘AE as the template to check and keep on track’	66
‘Checking as I’m writing’	66
‘Stop me from getting off track, or stuck’	67
‘Highlighting the track’	68
‘Built AE... but they didn’t come’	68
‘I can do this myself, I have access to other resources’	69
‘I had no time... I forgot’	69
‘Not useful...I did not want to plagiarise’	70
Discussion	71

Limitations.....	72
Conclusion and relevance to clinical practice.....	72
<b>Chapter 6:.....</b>	<b>74</b>
<b>Discussion and Conclusion .....</b>	<b>74</b>
Introduction.....	75
Review of the literature: Paper 1 .....	75
Quantitative phase: Paper 2.....	77
Qualitative phase: Paper 3 .....	78
Lack of clarity about academic writing.....	79
Challenges for students with academic writing .....	79
Other barriers to engagement with learning support strategies.....	80
Strengths and limitations .....	81
Recommendations for nursing education .....	82
Conclusion.....	83
References .....	84
<b>Appendices .....</b>	<b>102</b>
Appendix A. Paper 1 .....	103
Appendix B. HREC Approval.....	111
Appendix C. Annotated Exemplar .....	115
Appendix D. Paper 2 .....	131

## List of Tables

2.1	Quality appraisal.....	16
2.2	Summary of included studies .....	18
4.1	Demographic and academic characteristics .....	47
4.2	Demographic and academic predictors of quiz completion .....	48
4.3	Academic and demographic predictors of high essay mark .....	49
5.1	Participant demographics .....	61
5.2	Themes and subthemes .....	62

## List of Figures

1.1 Thesis structure .....	10
2.1 PRISMA flow diagram .....	15
3.1 Study design.....	30
3.2 Stratification of participants .....	34
3.3 Interview guide .....	35
3.4 Six steps of thematic analysis .....	36
4.1 Institutional data .....	45
5.1 Annotated exemplar sample.....	58
5.2 Student stratification for interviews.....	59

## Abbreviations

AE	Annotated Exemplar
CALD	Culturally and Linguistically Diverse
CASP	Critical Appraisal Skills Programme
CI	Confidence intervals
CINAHL	Cumulative Index to Nursing and Allied Health Literature
COREQ	Consolidated Criteria for Reporting Qualitative Research
ERIC	Education Resources Information Center
FASTEN	Feed-forward: Using Annotated Exemplars to Promote Student Engagement and Satisfaction
GPA	Grade Point Average
HV2	Health Variations 2
IQR	InterQuartile Range
LMS	Online eLearning Platform
NHMRC	National Health and Medical Research Council
NSW	New South Wales
OR	Odds Ratio
SPSS	Statistical Package for the Social Sciences
UK	United Kingdom
vUWS	Virtual University of Western Sydney

## Glossary

Enrolled Nurse, Endorsed Enrolled Nurse (EN, EEN)	An Enrolled Nurse is a person who provides nursing care under the direct or indirect supervision of a Registered Nurse (RN). They have completed the prescribed education preparation, and demonstrate competence to practice under the Health Practitioner Regulation National Law as an Enrolled Nurse in Australia. Enrolled Nurses are accountable for their own practice and remain responsible to an RN for delegated care (Nursing and Midwifery Board of Australia, 2017).
401014 Health Variations 2	Unit of study within a nursing program that incorporated the Annotated Exemplar as an academic support strategy
Blackboard	Virtual learning environment and learning management system developed by Blackboard Inc
Callista	Callista is the University Student Management System (SMS) and is used to manage student data
CASP template	Critical appraisal template used to systematically assess the trustworthiness, relevance and results of published papers
Feed-forward	Looks ahead to subsequent assessments and offers constructive guidance by clarifying expectations and standards thereby promoting student engagement and enhanced performance
Grade	A level of achievement for a course. This is calculated by combining the marks of the individual assessment items that make up the unit.
Grade point average	Is a number representing the average value of the accumulated final grades earned in courses over time



Mark	A mark is the level of achievement awarded as per specifically identified criterion for an assessment item.
SPSS	Software package used by researchers for complex statistical data analysis
Student Identification Number	Unique identifier associated with a student's academic record
vUWS	Online learning environment specific to Western Sydney University

# Chapter 1: Introduction

## Chapter introduction

There is an increasing shift to focus on assessment *for* learning in higher education (McDowell, 2013), instead of restricting to the traditional approach of only using assessment to evaluate student learning. Pivotal in this assessment process is the provision of assessment feedback and importantly, for students to engage with this feedback (Crisp, 2012). While there is growing recognition that timely and meaningful feedback is vital to student learning (Cathcart et al., 2013; Uribe & Vaughan, 2017), student engagement with feedback remains one of the most challenging areas in assessment design (Wanner & Palmer, 2018). A contributing factor for the lack of engagement with assessment feedback could be that students may not share the same academic discourse as the marker (Nash & Winstone, 2017).

Feed-forward is a strategy that aims to focus students' attention on the forthcoming assessment activity (Noon & Eyre, 2020). It is effective in engaging students, leading to improvement in students' grades and student satisfaction (Scoles et al., 2012). However, limited attention has been paid to examining the relationship between students' demographic data and the utility of a feed-forward strategy. This project aimed to assess the acceptability and effectiveness of a feed-forward strategy embedded as an assessment support strategy in an undergraduate nursing program.

## Changing landscape of higher education

Since the end of the 20<sup>th</sup> century, there has been a global expansion of providing higher education for the masses (Tight, 2019). The widening of participation strategies has enabled non-traditional students to gain entry into higher education (McCall et al., 2020). These students include those from low socioeconomic status backgrounds (McCall et al., 2020), mature age students who may not have engaged in academic study for extended periods (McCarey et al., 2007) and those from culturally and linguistically diverse (CALD) backgrounds who may require additional academic assistance in English language studies (Crawford & Candlin, 2013).

This increased participation of non-traditional students has contributed to the growing number of challenges in higher education, particularly in student

retention, progression and completion (Owen et al., 2021). Compounding the challenges of increased non-traditional students are several other changes in educational approaches that have impacted student learning in higher education. These include larger student cohorts and class sizes; shift in modes of teaching and learning from predominantly face-to-face teaching to online delivery (Davis et al., 2019); and the shift from didactic teaching to a style where academics are 'facilitators' of learning through feedback, resulting in assessment for learning, not just measuring if learning has occurred (Davis et al., 2019). Feedback has been identified as one of the most powerful and influential factors impacting student learning (van der Kleij, 2019), although it is only beneficial if students act upon the feedback provided to improve academic literacy.

### **Importance of assessment feedback to student learning**

For assessment to promote student learning, feedback is an intrinsic part of the process (Brown, 2004). Quality feedback influences student achievement (Beaumont et al., 2011), promotes greater academic engagement (Agius & Wilkinson, 2014) and consequently enhances student satisfaction (Robinson & Hullinger, 2008). Nevertheless, it is not unusual for higher education students to report low satisfaction levels, particularly in the areas related to staff-student interactions (Bradley, 2008). This was evidenced in a study that showed student satisfaction related to assessment feedback in Australia was less than 55% in a mixed cohort of students (Bradley, 2008).

### **Feedback and academic engagement**

Feedback, when used properly, can be an interactive tool that encourages staff and student interaction (Johnston et al., 2005). Feedback provides the opportunity for students to re-engage with the completed assessment task, thus promoting active learning (Nicol, 2010). However, whilst some students value feedback (Scoles et al., 2012), not all optimise the provided feedback (Li & De Luca, 2014). One plausible explanation could be that some students do not expect or find feedback to be beneficial, which may explain their lack of engagement (Handley & Williams, 2011). This results in missed learning opportunities that could be beneficial for future assessments (Quinton & Smallbone, 2010).

### **Feedback and academic performance**

Effective feedback has the potential to significantly improve student performance (Nicol & Macfarlane-Dick, 2006). Nevertheless, the impact of feedback on performance is variable (Crisp, 2007), and the intended outcome of providing feedback may not always be achieved (Lizzio & Wilson, 2008). While there is limited empirical data that demonstrates a direct impact from feedback on academic performance (Agius & Wilkinson, 2014; Hyland, 2010; Poulos & Mahony, 2008; Price et al., 2010), some evidence has been reported (Espasa & Meneses, 2010; Poulos & Mahony, 2008). Indeed Poulos and Mahony (2008) found a direct relationship between feedback and enhanced student learning, and Espasa and Meneses (2010) found that students who engaged with feedback performed better than those who did not.

### **Feedback and student satisfaction**

The literature has consistently reported that students are dissatisfied with assessment feedback (Burke, 2009; Carless, 2006; Hernández, 2012; Nicol, 2010). This is not a new issue. In a review focusing on assessments Krause et al. (2005) reported student dissatisfaction with assessment feedback is long-standing. Higher education does not seem to be making inroads into this enduring problem. The findings of First-Year Experience in Australian Universities 1994–2009 confirms feedback continues to be a significant concern for students, with one-third claiming they did not receive helpful feedback (James et al., 2010). Therefore, effective feedback is important because students who are satisfied with their university experience report higher levels of student academic engagement and better academic outcomes (Robinson & Hullinger, 2008).

### **Challenges with traditional approaches of providing assessment feedback**

In higher education, the effectiveness of traditional approaches of assessment feedback remains variable for a range of reasons. Students often do not read feedback and if they do, they do not know how to optimise its use (Price et al., 2010). Explanatory factors for the ineffectiveness of traditional approaches of assessment feedback include: (i) significant delays receiving feedback, especially in large cohorts; (ii) marking for large cohorts that prohibits effective feedback mechanisms; (iii) students misinterpret feedback or there is insufficient detail or direction in feedback received; (iv) inconsistency between markers

/tutors; and (v) students do not understand the transferability of feedback to other assessment tasks/subjects (Ferguson, 2011; Li & De Luca, 2014; Nicol, 2010; Robson et al., 2012; Taylor et al., 2011). Each of these factors will be explored in the following sections.

### ***Timeliness of feedback***

For feedback to be effective it must be provided to the student promptly (Cathcart et al., 2013). Timely feedback is essential for the student to be able to apply the suggestions to current and future assessment tasks (Li & De Luca, 2014). Returning feedback to students promptly is becoming more challenging as student enrolment numbers increase (Yorke et al., 2010). Ferguson (2011) supports these claims stating that timely, high-quality feedback may be more difficult to deliver in subjects with large student cohorts with the methods of assessment and feedback used for smaller groups, becoming near impossible to apply to student cohorts of over 500 students.

### ***Marking for large cohorts***

Providing timely and high-quality feedback with large student cohorts is challenging (Ferguson, 2011; Voelkel, 2013). In addition, the increasing student to staff ratio may make it difficult to provide the kind of targeted and tailored feedback most preferred by students (Taylor et al., 2011). The casualisation of the academic workforce to provide sufficient staff to teach large cohorts further complicates the issue due to variability of expertise and experience within the teaching staff (Andrew et al., 2010).

### ***Problems with transferability***

Students experience difficulty understanding the transferability of feedback between assessment tasks and across subjects (Robson et al., 2012). Weaver (2006) asserts that students are not guided as to how assessment feedback may be used. Hence, it is not surprising that students often misinterpret the feedback provided (Handley & Williams, 2011). The modularisation of study programs commonly used in subjects in higher education encourages students to compartmentalise their learning as they complete each subject (Burke, 2011). This problem is further compounded if assessment requirements vary between academic staff and across subjects (Hounsell et al., 2008).

***Lack of comprehensive feedback***

Students can often misinterpret feedback because there is insufficient detail provided or the feedback does not clarify the points that the student did not understand (Nicol, 2010). It is also challenging for students to utilise feedback when they do not understand particular concepts or criteria used to measure the achievement of outcomes (Sadler, 2010). In addition, the academic language used in feedback is sometimes difficult for students to understand (Lizzio & Wilson, 2008) and a lack of consistency in the interpretation of key terms can be problematic for students, especially when they differ significantly from one academic to another (Yucel et al., 2014).

***Inconsistency between markers***

For feedback to be credible, to engender confidence among students and to guide their learning, feedback must be consistent between subjects and markers. The variability of the level of detail in feedback provided between markers contributes to student confusion (Burke, 2011; Ferguson, 2011). Furthermore, the differing emphasis on assessment requirements by various markers exacerbates student confusion (Li & De Luca, 2014). Whilst some markers may be clear about assessment expectations, these may not be communicated effectively to students (McKevitt, 2015). Nicol (2010) argues that there is a strong body of research that shows students frequently do not share their teacher's expectations of assessment tasks.

***A way forward: feed-forward using annotated exemplars***

A way forward in mitigating some of the challenges is through the use of feed-forward strategies. Feed-forward is not a new concept and feed-forward approaches have previously been reported in the literature (Duncan, 2007; Robson et al., 2012; Scoles et al., 2012). Feed-forward has been defined as a process where students attempt an assessment task, receive feedback and then apply the new understanding to further assessment tasks (Carless, 2006; Wimshurst & Manning, 2012). However, there are numerous variations in the implementation of feed-forward strategies. For example, Duncan (2007) used feedback given to students from previous assessment submissions to create a learning plan for students to apply to future assessment tasks. Robson et al. (2012) utilised formative assessment tasks, provided feedback to students with

the expectation that the feedback would be utilised for a summative piece of assessment. Additionally, Scoles et al. (2012) used examinations as exemplars with comments to provide students with examples of the requirements as a feed-forward strategy.

Feed-forward exemplars annotated with comments provide a tool for students to make sense of feedback and how it should be applied to improve a student's academic writing (Quinton & Smallbone, 2010). Therefore, the intention is to guide students regarding the use of feedback from one assessment to future assessment tasks (Rae & Cochrane, 2008). All feed-forward strategies have either provided model answers, asked the student to grade a sample and provide feedback (Scoles et al., 2012) or required students to submit work and, when feedback has been provided, revise and then resubmit the work again (Robson et al., 2012).

The challenge in applying known feed-forward methods for this research project is two-fold. Firstly, the project involves a large student cohort; approximately 1100 students across three campuses. The second challenge is that the time available during the semester to assist students with the feed-forward process is limited. Students have a practical work placement that uses four of the available thirteen teaching weeks. Therefore, the strategy utilised in this study provides a model essay annotated with explanatory notes guiding the students in its use. The resource is easily accessible on the students' eLearning platform.

## **Aim**

The primary objective of the Feed-forward: Using Annotated Exemplars (AE) to Promote Student Engagement and Satisfaction (**FASTEN**) Project is to examine the relationship between the use of AEs and subsequent academic performance in an undergraduate Bachelor of Nursing unit. Therefore, this project sought to answer the following two research objectives:

- a) To report the effectiveness of AEs in a large, multi-campus cohort examining the relationship between uptake and engagement with an AE and students' socio-demographic profile and determining if engagement with the AE has an impact upon academic performance



- b) To explore students' experiences of using the AE, specifically identifying the benefits and challenges of using the AE

### **Significance of the study to nursing education**

It has been well established that quality feedback has a strong influence on student achievement, promoting academic engagement and student satisfaction (Beaumont et al., 2011; Robinson & Hullinger, 2008). In the era of massification in higher education and widening participation admitting students from diverse backgrounds (Devlin & Samarawickrema, 2010), there is greater variability in student expectations of assessment requirements (Boud & Falchikov, 2006). In today's society, it is not unusual for students to be juggling many competing interests and having multiple responsibilities (Stuart et al., 2011). Hence, pedagogical approaches must consider this when designing learning activities to promote student engagement as this will optimise educational outcomes (Robinson & Hullinger, 2008). It has also been established that students are more likely to be engaged academically if they believe that the skills and capability are not too far beyond their reach (Zepke & Leach, 2010). Nevertheless, higher education requires students to meet key essential graduate attributes during their studies.

One strategy to bridge the gap is to design 'front-end' support strategies that would meet the needs of students from diverse backgrounds and entry levels (Scoles et al., 2012). Therefore, this study will examine student uptake of a feed-forward strategy, and explore the relationship between its utility and effectiveness, as well as seek to understand nursing students' experiences with the AE embedded as an assessment support strategy in an undergraduate nursing unit. This will provide an evidence base upon which to develop pedagogy into the future that both meets students' needs and provides high-quality educational outcomes.

### **Thesis structure**

This thesis is divided into six chapters (Figure 1.1) and contains three peer-reviewed publications. Two of these papers have been published and the third has been submitted for peer review. The thesis has been presented according to the University of Wollongong (UOW) Higher Degree Research (HDR) Thesis by

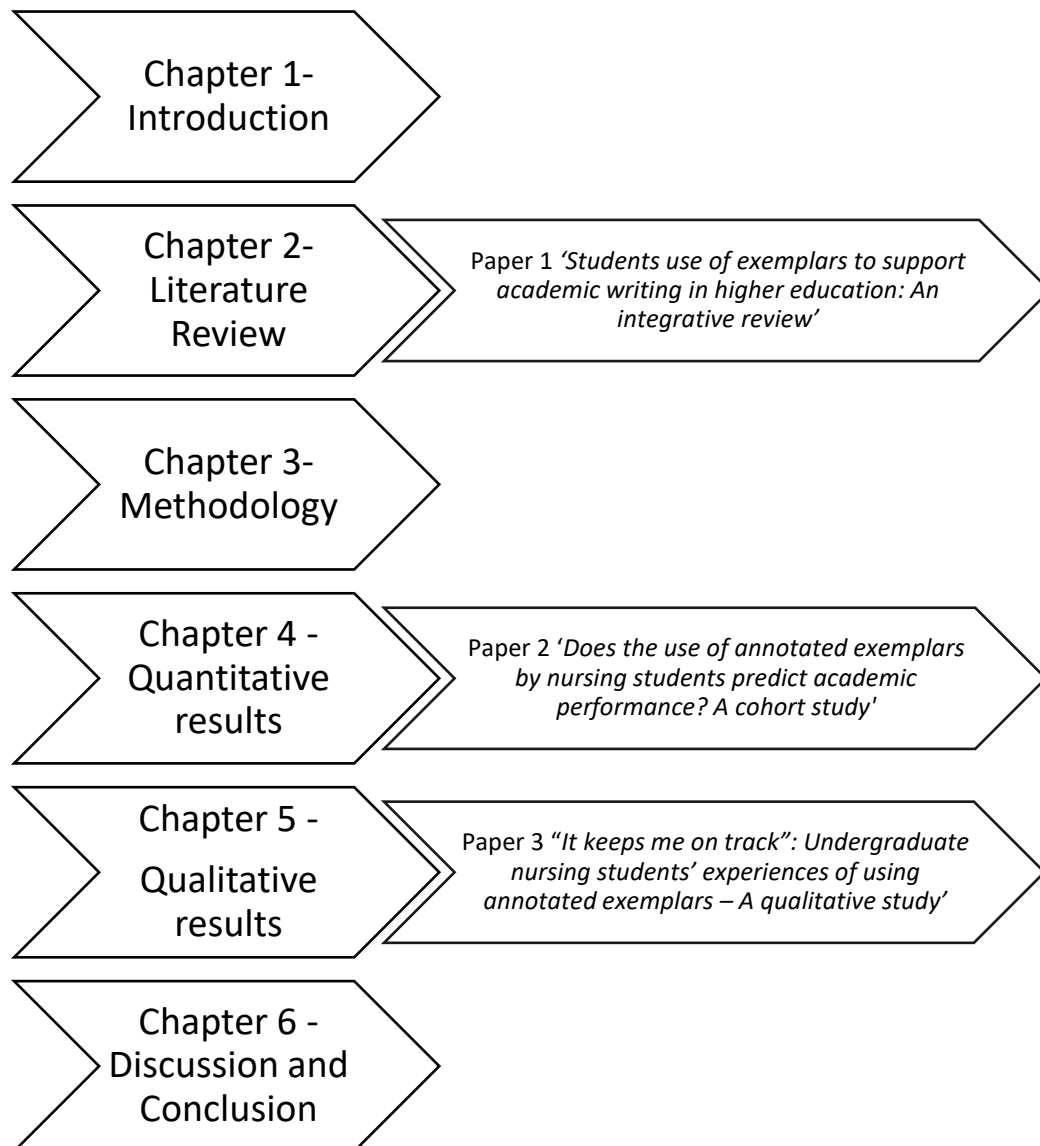
Compilation Guidelines (University of Wollongong, 2017). Therefore, although they retain the structure of the journal paper, all papers have been reformatted and presented as chapters within the thesis. As the lead researcher, the research candidate provided the most significant contribution and was the first author in all publications. The candidate conducted the review of the literature, undertook data collection and analysis, and drafted, submitted, and revised papers for publication. Supervisors provided critical review and expert opinion on all aspects of study design, research methodology, analysis of data, and preparation and submission of papers for publication.

This first chapter provides an introduction, which describes the background of the study, the purpose of the study, the significance of the study to nursing education and the thesis structure. Chapter 2 presents a published integrative review of the literature titled; *'Students use of exemplars to support academic writing in higher education: An integrative review'* (Carter et al., 2018) (Paper 1)(Appendix A). This chapter reviews the impact of exemplars as a feedback strategy to support students academic writing.

The methodological approach and methods of conducting the study are outlined in Chapter 3. This Chapter details the study aims, design, setting and sample, the procedure for data collection and management, data analysis, and the ethical considerations.

Chapters 4 and 5 present the results of the study within two journal papers. Chapter 4 presents the quantitative results in a paper titled; *'Does the use of annotated exemplars by nursing students predict academic performance? A cohort study'* (Carter et al., 2019)(Paper 2)(Appendix D). Chapter 5 presents the qualitative results in a paper submitted for publication, titled; *"It keeps me on track": Undergraduate nursing students' experiences of using annotated exemplars – A qualitative study* (Carter et al., 2021) (Paper 3).

Finally, in Chapter 6, the key findings of the study are compared and contrasted with the published literature. Additionally, the limitations and implications of the research are discussed, and conclusions are drawn.



**Figure 1.1** Thesis Structure

# **Chapter 2: Literature Review**

### Chapter introduction

This chapter presents an integrative review describing the use of exemplars to support academic writing (Paper 1). This paper has been published in *Nurse Education Today* (Impact factor 3.442, Q1)(Appendix A) as;

Carter, R., Salamonson, Y., Ramjan, L., & Halcomb, E. (2018).  
Students use of exemplars to support academic writing in higher  
education: An integrative review. *Nurse Education Today*, 65, 87-95.

Elsevier grants permission for all students to include publications from its journals in a thesis.

### Abstract

**Background:** Timely and meaningful feedback is essential to promote active learning and student engagement with learning. However, achieving this remains elusive, particularly in undergraduate nursing programs that admit large student cohorts. One strategy to provide meaningful *en masse* feedback is to provide feed-forward support by using exemplars. To date, there has been limited evaluation of the effectiveness of this feedback strategy.

**Objective:** To review the impact of using exemplars as a feedback strategy to support student academic writing in higher education.

**Data Sources and Review Method:** A systematic search of electronic databases for original research papers published between 2000 and 2017 that used exemplars to support students' academic writing in higher education. An integrative review methodology was utilised to identify emerging themes.

**Results:** Ten papers met the inclusion criteria, revealing four themes; 1) exemplars as a tool for structuring and preparing assessment activities, 2) appraising exemplars provided as a teaching and learning activity, 3) the impact of exemplar use on academic performance, and 4) students' satisfaction of exemplars as a learning tool.

**Conclusion:** Despite the diverse approaches in the use of exemplars, this review highlighted that students value exemplars as a teaching tool. However, the benefits of exemplar use were not always reflected in students' academic performance. Further research is required, particularly in a nursing context, to understand the impact of exemplars on student learning.

**Introduction**

Assessment is an essential activity in higher education, as it provides evidence of student learning (Hernández, 2012). However, despite being provided with the same instruction, guidance and assessment support, undergraduate nursing students may have a different interpretation of what is required to successfully complete assessment tasks (Wiliam, 2011). Such differing interpretations can, subsequently, impact assessment outcomes.

Assessment in higher education is commonly classified into either formative or summative. Whilst formative assessments are used to scaffold learning, summative assessments measure academic achievement (Crisp, 2012). Formative assessment encourages learning as students engage with feedback to self-assess and identify areas to improve (Crisp, 2012). Formative assessments engage students and facilitate them to take ownership of their learning, they can also be diagnostic, as they enable students to reflect (Cox et al., 2007), identify gaps in knowledge and correct mistakes (Fluckiger et al., 2010). Formative assessments are also used by academics to guide teaching and monitor if they have achieved planned student learning outcomes (Hwang & Chang, 2011). Hence, there is a need to include both formative and summative assessments to ensure nursing students engage with feedback provided to learn beyond what is required to pass and also to consider their overall learning needs (Cox et al., 2007; Hounsell et al., 2008).

Feedback is a core element of formative assessment (Fluckiger et al., 2010). Timely and meaningful feedback promotes active learning, deeper understanding and scaffolds student learning (Carless, 2006; Nicol, 2010). Despite its potential value to learning and academic performance (Cathcart et al., 2013; Yorke, 2003), the provision of timely feedback remains one of the most challenging areas from the nursing students' perspective (Scoles et al., 2012).

Using a feed-forward approach is one strategy to provide timely, meaningful and focussed feedback to nursing students. Feed-forward is not a new concept, feed-forward approaches have previously been reported in the literature (Duncan, 2007; Robson et al., 2012; Scoles et al., 2012). Feed-forward has been defined as a process where students attempt an assessment task, receive feedback and then apply the new understanding to subsequent assessment items (Carless, 2006;

Wimshurst & Manning, 2012). A feed-forward approach using exemplars allows students to make sense of the feedback and how it should be applied to improve academic writing (Quinton & Smallbone, 2010; Rae & Cochrane, 2008). Exemplars are an important tool for clarifying expected standards and quality of work (Newlyn & Spencer, 2010). Students highly value the use of AEs (Handley & Williams, 2011) and believe them to be an effective mechanism to scaffold student learning because they provide an example of a desired response and information to guide the formation of the assessment item (Bruno & Santos, 2010). For this reason, to fully understand the impact of exemplars to support students' academic writing, it is necessary to review the literature.

## **The review**

### ***Aim***

This paper seeks to critically review student perceptions of exemplars and the impact of using exemplars as a feedback strategy to support academic writing in higher education.

### ***Method***

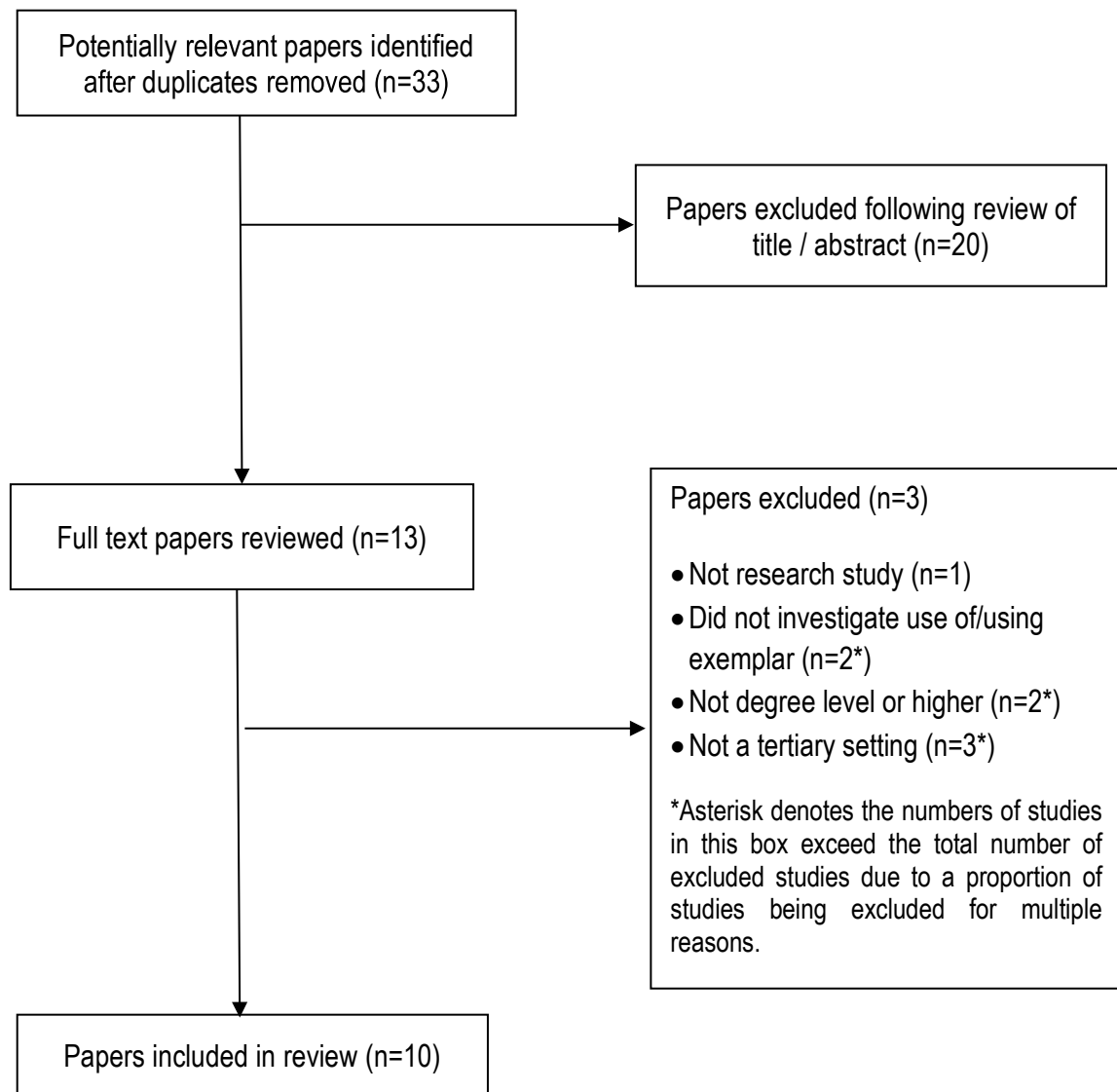
The integrative review process described by Whitemore and Knafl (2005) was used to guide this review.

### ***Search strategy***

A three-phased search strategy was used, consisting of an initial structured electronic database search, followed by searching the reference lists of identified papers, as well as hand searching relevant journals. The database search sought to identify primary research papers reporting the use of AEs to support students' academic writing published in the English language between 2000 and 2017. CINAHL, Education Research Complete + ERIC, Informit, ProQuest Central, Scopus, Taylor & Francis and Web of Science databases were searched using search terms including; Feedforward; Feed forward; feeding forward; strategie\*; higher education; annotated exemplars; video feedback; interactive feedback and individualised feedback. Papers were excluded if they were not original research, did not evaluate an AE intervention, if participants were not studying at a degree level or higher in a tertiary setting, or were duplicate articles of the same research project.

**Search outcome**

This search initially yielded 55 potentially relevant papers (Figure 2.1). After checking for relevance and following the removal of duplicates, 33 papers remained. A further 20 papers were excluded because they did not meet the inclusion criteria. This left 13 papers that were subjected to full review by two authors. After this review, 10 papers were identified as meeting the inclusion criteria.



**Figure 2.1** PRISMA flow diagram (Page et al., 2021)



### **Quality appraisal**

The CASP (2006) template was used to systematically appraise the quality of identified papers. The tool facilitated appraisal of the clarity of the aim, appropriateness of the research design, methodology and data collection and rigour of the data analysis (Table 2.1). Additionally, the tool revealed whether ethical considerations were addressed, a statement of finding was included and that the research was viable (CASP, 2006). Given the small number of included papers and the minimal methodological flaws, no papers were excluded based on the quality appraisal.

**Table 2.1** Quality appraisal

Citation	Aim	Methodology	Design	Sample / Recruitment	Data Collection	Relationships	Ethical Issues	Data Analysis	Statement of Findings	How Valuable is Research?
Bell et al. (2013)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Handley and Williams (2011)	✓	✓	✓	✓	✓	✓	X	✓	✓	✓
Hendry et al. (2016)	✓	✓	✓	✓	✓	✓	X	✓	✓	✓
Hendry and Anderson (2013)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Hendry and Jukic (2014)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Hendry et al. (2011)	X	✓	✓	✓	✓	✓	✓	✓	✓	✓
Newlyn and Spencer (2010)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Scoles et al. (2012)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Wimshurst and Manning (2012)	✓	✓	✓	✓	✓	✓	X	✓	✓	✓
Yucel et al. (2014)	✓	✓	✓	✓	✓	✓	X	✓	✓	✓

### **Data abstraction & synthesis**

Data were abstracted from each paper into a summary table (Table 2.2). Once extracted these data were examined for common themes using a process of thematic analysis informed by Braun and Clarke (2006). Each paper was reviewed and, once familiar with the data, the researchers independently generated initial codes. This process continued identifying themes and subthemes (Braun & Clarke, 2006). Once this process was completed the authors collaborated to discuss their findings and achieve a consensus to reduce subjective bias.

## Results

### ***Methodological features***

All 10 included studies originate from either the United Kingdom ( $n=3$ ; 30%) or Australia ( $n=7$ ; 70%). Included studies drew on a combination of undergraduate and postgraduate tertiary cohorts, enrolled in a range of diverse disciplines. Despite the diversity of disciplines, the search strategies used failed to yield any articles from nursing education. As can be seen in Table 2, sample sizes varied significantly, ranging from 50 (Hendry & Anderson, 2013) to more than 1100 participants (Yucel et al., 2014). Six studies used exemplars only (Hendry & Anderson, 2013; Hendry et al., 2012; Hendry & Jukic, 2014; Hendry et al., 2016; Scoles et al., 2012; Wimshurst & Manning, 2012) and four annotated the exemplars to support students' preparation for assessment (Bell et al., 2013; Bird & Yucel, 2013; Handley & Williams, 2011; Newlyn & Spencer, 2010).

Four key themes emerged from the included papers, namely; 1) exemplars as a tool for structuring and preparing assessment activities, 2) appraising exemplars provided as a teaching and learning activity, 3) the impact of exemplar use on academic performance, and 4) students' satisfaction of exemplars as a learning tool.

### ***Exemplars as a tool for structuring and preparing assessment tasks***

Five papers (50%) reported that participants believed the use of exemplars assisted them to improve the structure of their assessment tasks (Hendry & Anderson, 2013; Hendry et al., 2012; Hendry & Jukic, 2014; Hendry et al., 2016; Wimshurst & Manning, 2012). These studies described a variety of different assessment tasks, including examination answers (Hendry & Jukic, 2014), essays (Hendry & Anderson, 2013), letters (Hendry et al., 2012) critical reviews (Hendry et al., 2016) and case studies (Wimshurst & Manning, 2012). Additionally, students found using exemplars showed them how to better present their information (Wimshurst & Manning, 2012) and when coupled with the teacher's explanation, provided them with a clearer understanding of expected standards of work (Bell et al., 2013; Hendry & Anderson, 2013; Hendry et al., 2016; Wimshurst & Manning, 2012).

**Table 2.2** Summary of Included Studies

Citation	Country	Sample	Assessment / Intervention	Method & Data Collection	Results	Limitations & Comments
Bell et al. (2013)	UK	119 (45% of enrolled students) of 1 <sup>st</sup> year UG accounting students	Assessment: Group and individual written assignment with group presentation on an ethical issue from a newspaper article.  Intervention: AE and grade descriptors provided in Week 1	1. Written student reflection embedded within assessment task	<ul style="list-style-type: none"> <li>87% found resources helpful</li> <li>Resources found to be useful when seeking precise guidance, and in providing the standards required, including an indication of lecturers' expectations.</li> <li>Resources provided a framework, assisted with their learning and assisted them achieved the desired marks</li> <li>A few participants reported the resources to be restrictive, unnecessary and not helpful</li> </ul>	<ul style="list-style-type: none"> <li>Data collected as part of the assessment - impact negative feedback.</li> <li>Evaluation of the assessment was global (i.e. included other resources beyond the annotated exemplar).</li> </ul>
Handley and Williams (2011)	UK	2 <sup>nd</sup> year UG business students (n=400) Semester 1; n=325 Semester 2)	Assessment: Written assignment to be completed by student pairs  Intervention: Exemplars used sourced from previous students (similar in structure but different topic), and annotated with feedback	<ol style="list-style-type: none"> <li>Participants' hit rates of exemplars</li> <li>Online survey</li> <li>Informal conversations with participants</li> </ol>	<ul style="list-style-type: none"> <li>High hit rates of &gt; 4 per participant on the of the AEs on the eLearning platform</li> <li>73% of participants found the exemplars to be very useful</li> <li>Open-ended survey questions showed that participants valued the exemplars highly</li> <li>No group differences were detected between participants who used and those who did not use the exemplars</li> </ul>	<ul style="list-style-type: none"> <li>Low (15%) response rate from the online survey.</li> <li>Positive, but weak (<math>r = 0.28</math>, <math>p &lt; 0.01</math>) correlation between participant hit rates and coursework marks.</li> </ul>

Citation	Country	Sample	Assessment / Intervention	Method & Data Collection	Results	Limitations & Comments
Hendry et al. (2016)	Australia	81 2 <sup>nd</sup> year UG animal science students	<p>Assessment: Critical review of scientific paper.</p> <p>Intervention: Two de-identified exemplars of previous students' critical reviews of a different article. Students asked to grade exemplars then discuss in class. Tutor facilitated in-class discussion.</p>	1. Survey	<ul style="list-style-type: none"> <li>Participants reported they learned the structure of a good essay</li> <li>Discussion of the essay exemplars gave participants more confidence to write their assignment</li> <li>Teachers explanation of expected standard was useful</li> <li>Participants with higher grades reported that the exemplars made it easier for them to be creative with their own assignment than those who achieved lower grades.</li> </ul>	<ul style="list-style-type: none"> <li>Response rate was 49%</li> <li>Feedback from participants obtained after the grades of assessment has been made known to participants, which was likely to influence their responses</li> <li>Positive correlation between participants perception of usefulness of exemplar marking and discussion, and participant's achievement in the assessment task (<math>r = 0.56, p &lt; 0.001</math>)</li> </ul>
Hendry and Anderson (2013)	Australia	24 UG education students and 26 PG Master of Teaching students	<p>Assessment: Written essay</p> <p>Intervention: Students given exemplar essays to grade before class using marking guide. Then held class group discussion about essay and grades. Tutor facilitated in class discussion</p>	<ol style="list-style-type: none"> <li>Paper survey</li> <li>Individual interviews</li> <li>Focus groups</li> </ol>	<ul style="list-style-type: none"> <li>Exemplars assisted participants to learn about how to structure their essay and teacher expectations.</li> </ul>	<ul style="list-style-type: none"> <li>Small sample sizes despite the 100% response rate</li> <li>No difference in assessment performances as indicated by distribution of grades, compared to students from previous years.</li> </ul>

Citation	Country	Sample	Assessment / Intervention	Method & Data Collection	Results	Limitations & Comments
Hendry and Jukic (2014)	Australia	26 UG & 47 PG students in a nutritional assessment subject	Assessment: Final exam Intervention: Exemplars of previous students. Participants given a high and a low scoring exemplar to mark. Tutor then marked both exemplars in class and provided rationale.	1. Online survey 2. Focus groups	<ul style="list-style-type: none"> <li>Both UG and PG cohorts achieved significantly higher scores in exams than the previous year's cohort (<math>p &lt; 0.001</math>)</li> <li>Marking class led participants to think about the quality of their exam answers</li> <li>Participants reported thought that they learned the structure of a good exam answer</li> <li>Teacher's explanation found to be the most useful aspect of the marking class</li> <li>One third found discussing in groups differences of interpretation challenging</li> </ul>	<ul style="list-style-type: none"> <li>Response rate of 25%</li> <li>Small participant numbers in focus groups</li> <li>Focus group undertaken after results final exam results known and may have biased responses</li> </ul>
Hendry et al. (2012)	Australia	181 1 <sup>st</sup> UG Law students. Five tutors	Assessment: Legal letter Intervention: Students are asked to grade 3 past papers (fail, credit & distinction) using marking criteria. Tutors led class discussion providing a rationale for grades.	1. Focus groups 2. Survey 3. Individual interviews	<ul style="list-style-type: none"> <li>An increase in confidence to write a quality letter was reported</li> <li>Exemplars provided participants with a guide for the style of language to be used and assisted with structuring their letter</li> <li>The discussion of exemplars in class with teacher was reported to be helpful</li> <li>Those with the tutor who did not discuss the exemplar scored lower on the assessment than others</li> </ul>	<ul style="list-style-type: none"> <li>Response rate was 37%</li> <li>Variability in the using exemplars in class the teaching approach in using the exemplars was inconsistent.</li> </ul>

Citation	Country	Sample	Assessment / Intervention	Method & Data Collection	Results	Limitations & Comments
Newlyn and Spencer (2010)	Australia	UG Business Law Students. 2008/09 (n=95) & 2009/10 (n=30)	Assessment: Final exam Intervention: 5 past exam papers annotated with comments uploaded onto eLearning portal (fail, Pass, Credit, Distinction & High Distinction)	Exam marks	<ul style="list-style-type: none"> <li>Positive impact on students' performance as reflected in students' final exam results, compared to students' performance in previous years</li> </ul>	<ul style="list-style-type: none"> <li>True sample size unknown. Exemplars were downloaded by 212 students in 2008/2009 &amp; 84 students in 2009/2010 but this exceeded the number of students enrolled at the time.</li> </ul>
Scoles et al. (2012)	UK	UG & PG students (n=520) enrolled in 12 modules of life sciences	Assessment: Final exam Intervention: 3 past exam papers annotated with feedback and comments uploaded onto eLearning portal (average, good & excellent quality)	<ol style="list-style-type: none"> <li>Students' access to exemplars</li> <li>Exam marks</li> <li>Group interviews with students</li> <li>Individual lecturer interviews</li> </ol>	<ul style="list-style-type: none"> <li>Those who used the exemplars performed better in the final exam than those who did not (mean: 54.8% versus 48.7%)</li> <li>Interviews revealed that exemplars were received positively by participants</li> <li>Student participants reported that the exemplars help them understand assessment requirements</li> </ul>	<ul style="list-style-type: none"> <li>interviewees were self-selected and may not be representative of students across the performance spectrum.</li> <li>A high-achieving student and several international students participate in the interviews, hence, not representative of the overall profile of student cohort</li> </ul>
Wimshurst and Manning (2012)	Australia	97 UG Youth Justice students	Assessment: 1) Case study report with two parts (Parts A & B), and a final exam. Intervention: Exemplars were used as an activity for	<ol style="list-style-type: none"> <li>Student characteristics including GPA</li> <li>Case study and exam marks</li> </ol>	<ul style="list-style-type: none"> <li>Demonstrated better performance of case-study assessment compared to previous cohort</li> <li>No significant difference in exam performance compared to previous cohort.</li> </ul>	<ul style="list-style-type: none"> <li>Students' higher performance in the case study assessment compared to previous cohort could also be contributed by the class</li> </ul>

Citation	Country	Sample	Assessment / Intervention	Method & Data Collection	Results	Limitations & Comments
			Part A of the case-study assessment Feedback on Part A performance before submission of Part B of the case study assessment.	3. Optional submission of students' reflection of the activity	<ul style="list-style-type: none"> <li>Participants found exemplars increased awareness of expected standards</li> <li>Participants reported exemplars showed them how to integrate descriptions and observations</li> </ul>	and individual feedback provided, in addition to the support received from engaging with the exemplars.
Yucel et al. (2014)	Australia	1 <sup>st</sup> year UG biology students 2009 (n=373) 2010 (n=403) & 2011 (n=488)	<p>Assessment: Submission of two scientific reports.</p> <p>Intervention: Two exemplars (very good and average).</p> <p>Students asked to mark two exemplars (very good and average) and justify marks awarded as a group activity.</p> <p>Students required to bring draft report for blinded peer marking before final submission.</p>	<p>1. Report marks for 2010 cohort</p> <p>2. Survey for 2011 cohort.</p>	<ul style="list-style-type: none"> <li>Students who were provided with exemplars performed significantly worse (i.e. 2010 cohort) than those who did not have the exemplars (i.e. 2009 cohort), despite similar academic entry score of the two cohorts</li> <li>Students with exemplar support (i.e. 2010 cohort) improved their assessment performance in the second report; this was not the case with the 2009 cohort (i.e. those who did not receive exemplar support)</li> <li>Survey respondents reported marking and discussion of exemplars clarified expectations and were helpful</li> </ul>	<ul style="list-style-type: none"> <li>Marker bias may have adversely affected report results in 2010</li> <li>The authors did not report on the academic performance of students in 2011 cohort, who also received exemplar support, but only reported on students' feedback on the use of exemplars in this subject.</li> </ul>

Hendry et al. (2012) reported that participants rated the exemplars higher than the marking sheet for guidance. Despite the positive impact of exemplars on the structure of work, two other studies (Bell et al., 2013; Handley & Williams, 2011) found that exemplars and associated resources, such as grade descriptors and marking criteria were not useful in structuring their task as they were 'restrictive' and 'subjective' or limited creativity (Hendry et al., 2016).

***Appraising exemplars provided as a teaching and learning activity***

Using exemplars as a teaching and learning activity to prepare for assessment tasks received mixed responses. Five studies (50%) explored the impact of students appraising exemplars (Hendry & Anderson, 2013; Hendry & Jukic, 2014; Hendry et al., 2016; Wimshurst & Manning, 2012; Yucel et al., 2014). These studies reported various strategies including, student appraisal of exemplars only (Wimshurst & Manning, 2012), group appraisal of exemplars and marking classes which required students to discuss and/or determine model answers (Hendry & Anderson, 2013; Hendry & Jukic, 2014; Hendry et al., 2016; Yucel et al., 2014). Whilst the specific techniques varied between papers, all studies required students to either appraise a peer's work or critically appraise an exemplar.

Appraising exemplars in the class led to an increase in participation (Wimshurst & Manning, 2012), facilitated students understanding of the variable opinions held about exemplar quality (Hendry & Anderson, 2013; Hendry et al., 2016; Yucel et al., 2014) and facilitated learning from each other's errors (Yucel et al., 2014). These class discussion exercises also clarified criteria and/or standards (Handley & Williams, 2011; Yucel et al., 2014) and were helpful to students in improving their own assessment submissions (Hendry et al., 2016; Yucel et al., 2014).

Not all student responses to the use of exemplars were favourable. Whilst appraising exemplars in a class environment was a positive experience for many, some students reported that it was challenging because student interpretations of the quality of exemplars differed (Hendry & Jukic, 2014; Hendry et al., 2016). Yucel et al. (2014) also reported that some participants found these exercises were unhelpful. These participants were also dissatisfied with the quality or quantity of the feedback given, believed their peer was inexperienced or were disinterested in the activity itself.



***Impact of exemplar use on academic performance***

An improvement in assessment grade is the best indicator of the positive impact of a teaching and learning intervention. However, only six studies (60%) reported an impact upon the grade awarded for the assessment task as an outcome measure (Handley & Williams, 2011; Hendry & Jukic, 2014; Newlyn & Spencer, 2010; Scoles et al., 2012; Wimshurst & Manning, 2012; Yucel et al., 2014). Four studies (40%) concluded that exemplars had a positive impact on grades for both undergraduate and postgraduate students (Hendry & Jukic, 2014; Newlyn & Spencer, 2010; Scoles et al., 2012; Wimshurst & Manning, 2012). Yucel et al. (2014) found that there was no improvement when exemplars were used for the first time. In fact, students who were provided with exemplars performed significantly worse than those who were not. However, there was a noted improvement in subsequent assessment tasks; more participants who used the intervention scored higher marks for the second report than those who did not use the exemplar for their first assessment task (Yucel et al., 2014). Handley and Williams (2011) found that there was no increase in grades awarded following the use of the exemplar.

***Students' satisfaction of exemplars as a learning tool***

Eight studies (80%) reported the satisfaction of exemplars from the student perspective (Bell et al., 2013; Handley & Williams, 2011; Hendry & Anderson, 2013; Hendry et al., 2012; Hendry & Jukic, 2014; Hendry et al., 2016; Scoles et al., 2012; Yucel et al., 2014). Overall students perceived AEs as useful when used as a learning tool for class discussions facilitated by a tutor because they improved confidence and developed critical thinking skills (Hendry & Anderson, 2013; Hendry et al., 2012; Hendry & Jukic, 2014; Scoles et al., 2012). However, the perceived benefits varied somewhat between the studies. Students found exemplars useful because they provided standards and clarified expectations (Bell et al., 2013; Yucel et al., 2014). However, in two studies the findings were mixed, a small proportion of participants reported they found AEs not useful (Bell et al., 2013; Handley & Williams, 2011).

**Discussion**

This review has shown that, in higher education, exemplars are an important tool for clarifying expected standards of assessment (Hendry & Anderson, 2013;

Hendry et al., 2012; Hendry & Jukic, 2014; Hendry et al., 2016; Wimshurst & Manning, 2012). Using exemplars as a learning tool is further enhanced when supported by class discussion because it allows for clarification of criteria and standards (Handley & Williams, 2011). Students used exemplars for a variety of reasons but many used them to provide structure or as a template for the assessment task; providing specific information on the layout and structure before they started writing the assessment (Agius & Wilkinson, 2014). In addition to providing a guide or framework, the review highlighted that participants believed they had a clearer understanding of the topic when teachers discussed the exemplars with students (Hendry et al., 2016). This is supported by Iacobucci et al. (2015) who describe how a discussion was helpful for students to support understanding of the task requirements.

This review has demonstrated that exemplar appraisal activities lead to increased engagement with the task and subsequently group participation. This is similar to the finding of Nicol (2010) who reported greater engagement with a task when peer to peer feedback is carried out. Peer discussion is useful in allowing students to generate ideas and negotiate meanings (Iacobucci et al., 2015). Exemplars as a learning tool has the potential to improve students' confidence and critical thinking skills but this depends on other factors, for example, the way the teacher explains how to use exemplars to critically evaluate their work or how the exemplar is used (Sadler, 2010). Peer feedback and appraisal activities are also important in practice disciplines such as nursing, because they prepare participants for feedback and performance management processes in the workplace (Agius & Wilkinson, 2014).

Mixed findings of improvement in academic performance highlighted in this review may indicate that the use of exemplars is only one strategy and may not be the solution for all students. Bell et al. (2013) reported a small number of students believed exemplars may stifle creativity because they were too restrictive. Whilst Yucel et al. (2014) found participants who used exemplars did not demonstrate an improvement in academic performance the first year, both Yucel et al. (2014) and Newlyn and Spencer (2010) found those who used the exemplars for the first assessment task performed better in the following assessment task than those who did not. This is not dissimilar to another study

by Vardi (2013) who investigated the impact of feedback using exemplars. Vardi (2013) found there was no demonstrated improvement in grades when participants first used exemplars but grades did improve the following year. Further, these results differ from Wimshurst and Manning (2012) who noted an improvement in report marks awarded to students who used the exemplar. Furthermore, Scoles et al. (2012) and Wimshurst and Manning (2012) cited many participants who used exemplars achieved a higher mark; however, this increase was not represented across all assessment tasks, only those where the exemplar was provided, thereby questioning the transferability of skill to other assessment tasks and subjects (Wimshurst & Manning, 2012).

Traditional approaches of assessment feedback remain limited in effectiveness for various reasons; students do not read feedback and if they do, they do not know how to optimise its use (Price et al., 2010). Furthermore, students also may misconstrue feedback, particularly when an insufficient explanation was provided, or misconstrued the intended feedback (Nicol, 2010). This review underscores the usefulness of exemplars as a tool to enhance students' understanding of assessment requirements through the provision of concrete examples and elaboration of marking guides (Hendry & Anderson, 2013).

### ***Implications and recommendations for nursing education***

This review demonstrates that despite the limited evidence around the use of exemplars in higher education in general and nursing education specifically, students' value exemplars and using exemplars can positively impact academic performance. As such it highlights a gap in our understanding of the potential for exemplars to be used to support improved assessment outcomes.

### ***Limitations***

This review used a systematic search strategy developed in conjunction with a University Librarian. However, the lack of consistent terminology in the topic area hampered the search process. It is unclear why all papers emanate from the UK and Australia, this geographical constraint may impact the generalisability of findings. The variation between papers in terms of the course disciplines, level of study and types of assessment items makes comparison difficult. The absence of nursing education research in the area means that consideration needs to be

given to the transferability of findings from other disciplines into nursing education. Additionally, convenience sampling, various methods of measuring the impact of the intervention and use of non-validated data collection tools impacts the validity of findings.

### **Conclusion**

This integrative review critically appraises the available literature on the use of exemplars in higher education. Despite the paucity of available research to provide evidence of the effectiveness of and students' engagement with exemplars, this integrative review has identified that exemplars are potentially an important tool for scaffolding student learning. Additionally, the review highlights the value placed on exemplars by students as they give students the confidence to write better answers and clarify marker expectations. Whilst students value exemplars, success measured by improvement in grade awarded was mixed. It is unclear if this is because the intervention was not effective or because it was not implemented effectively. Therefore, further research is required to determine the impact of using exemplars as a feedback strategy to support nursing students' academic writing in higher education.

# **Chapter 3: Methodology and Methods**

## **Chapter introduction**

The previous chapter highlighted the need to scaffold student learning to aid student performance and highlighted the gaps in our current knowledge. This chapter will outline the methodology and methods used in this sequential, explanatory mixed-methods project to address the research problem. It will describe the study aim, the sampling strategy, the processes of data collection and analysis methods. Additionally, ethical considerations will be discussed.

## **Aims**

The primary aim of this Project was to examine the relationship between the use of AEs and subsequent academic performance in Bachelor of Nursing students. The secondary aim was to explore students' experiences of using the AE, specifically identifying the benefits and challenges of using the AE.

Therefore, this Project sought to answer the following two research aims:

- a) To evaluate the effectiveness of AEs in a large, multi-campus cohort examining the relationship between uptake and engagement with an AE and students' socio-demographic profile and determining if engagement with the AE has an impact upon academic performance (Phase 1).
- b) To explore students' experiences of using the AE, specifically identifying the benefits and challenges of using the AE (Phase 2).

As a range of data sources, both direct and indirect were relevant to answer the research objectives, a mixed-methods design was appropriate.

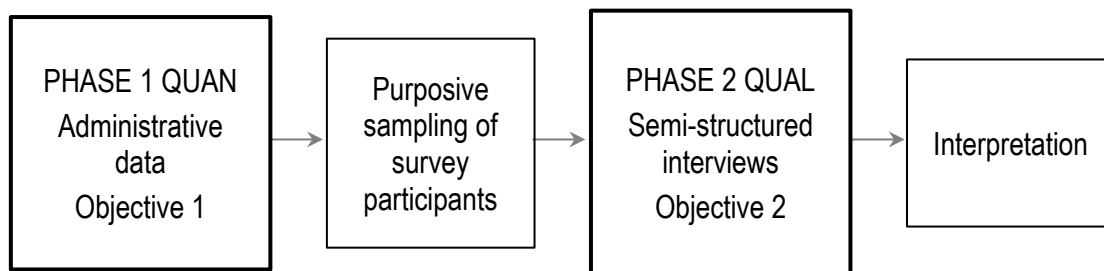
## **Mixed-methods research**

Mixed-methods research is ideal to address complex research problems, where the collection of qualitative and quantitative data can provide a range of perspectives (Subedi, 2016). Using a mixed-methods approach allows the use of both qualitative and quantitative methods to answer research questions and explore concepts (Byrne & Humble, 2007). This enables deeper exploration than would have been possible with either approach in isolation. However, using a mixed-methods approach is not just the collection of different types of data but

also involves integration to strengthen the study (Halcomb, 2019). Such integration can occur at any stage of the study.

Given the nature of the study, an explanatory, sequential design has been implemented where quantitative data is collected first then further explored with qualitative data (Hesse-Biber & Leavy, 2010). Additionally, the quantitative data is used to purposively select participants for the qualitative interviews. Despite its advantages of deeper exploration, the key disadvantage of this design is that data are collected sequentially, thus taking more time than a concurrent investigation.

In the FASTEN study, obtaining quantitative data (Phase 1) yielded objective, measurable information about participant uptake and engagement with the AE, participants' socio-demographic profile and whether the use of the AE had a positive impact upon academic performance. Using this information, the researchers identified which students chose to engage with the AE and if the intervention impacted their academic performance. From this data, students were stratified according to the GPA and level of engagement to identify potential participants for Phase 2. In Phase 2, two students from each stratum were interviewed in one-on-one semi-structured interviews to explore students' experiences of using the AE (Figure 3.1).



**Figure 3.1** Study Design

### Setting & participants

Participants were second-year undergraduate students enrolled in a single unit in the Bachelor of Nursing Program at a large university in NSW, Australia during Spring semester 2016. This unit is undertaken in the fourth semester of a three-year Bachelor of Nursing program and focused on disability and chronicity in health and wellbeing. Participants entered the Bachelor of Nursing via several pathways. Students without recognition of prior learning had completed 12 units

before attempting this unit and students who have received recognition of prior learning may have completed as few as four units before enrolling in this unit.

In this unit students explored case scenarios across the lifespan related to disability (Down syndrome) and chronic illness (diabetes, epilepsy, asthma or thyroid dysfunction). The unit had approximately 1,100 students enrolled across multiple campuses during the study. Two summative assessments were required to complete the unit, one 1,500 word essay and a final written examination. Each assessment was worth half of the total marks. To achieve an overall pass grade a student had to achieve an aggregate mark of 50%.

### **Exemplar**

The AE was a purpose-built resource developed by academics teaching in the unit and annotated by linguistic experts. Two academics wrote the exemplar essay using the same questions that students were required to answer for the assessment task but the content of the scenario was different to minimise risk of academic misconduct. This exemplar was then reviewed by a linguistics expert who annotated the exemplar with detailed information about what was to be included in each of the sections of the essay; introduction, body and conclusion. Additionally, the exemplar was highlighted with a range of colours drawing emphasis to a range of features and annotated with feedback explaining the significance of these features (Appendix C). Lastly, the AE was reviewed by a third academic from within the School of Nursing and Midwifery who also has a linguistics qualification who reviewed the completed exemplar from both an expert content and linguistic perspective. The finalised exemplar was uploaded to the online Learning Management System (LMS). However, the online LMS did not provide specific detail about use of the AE, therefore, a short quiz completed by students after accessing the exemplar was used as a proxy to measure AE use and/or engagement by participants.

The assessment aimed to enable students to identify, critically examine and report on the effective nursing management of chronic illness in people with a functional disability across the lifespan. This would prepare students for professional practice when working with people with a disability and chronic illness. The AE demonstrated the structure and language of the essay so that



students would know how to write their own essay. The structure of the AE used the same format as the assessment essay; however, the content of the AE was different to minimise the risk of plagiarism.

### **Phase 1 Quantitative**

Phase 1 gathered quantitative information to explore the relationship between uptake and engagement with an AE, student demographics and performance (Objective 1).

### **Sampling and recruitment**

All students enrolled in the unit were registered as participants and contacted via their student email account by the research team to provide information about the study, including an information sheet. Students were offered the opportunity to opt-out of either or both phases of the research. The opt-out option was provided using a hyperlink which students could click to register their withdrawal.

### **Data collection**

Administrative and demographic data such as student identification number, age, gender, country of birth and GPA were extracted from the student management system, Callista, by one of the researchers. Student marks, attempts at AE quiz and the online Learning Management System (LMS) usage information (hit rates on the online LMS) were collected by the research team who downloaded data from the LMS site (Blackboard Learn 9.1 Q2 2018 CU1)(Blackboard.com, 2018).

These data were collected to identify the degree to which students engaged with the AE (attempted AE quiz); explore the characteristics of students who engaged with the AE (gender, age, GPA, previous study, overseas-born, language spoken at home, recognition of prior learning in Australia and overseas) and to determine if there was an improvement in essay mark with use of the tool (mark >54%).

### **Data management and analysis**

The SPSS version 22 was used for analysis (IBM, 2013). Data were imported and matched using the student number as a unique identifier. A manual check of the data was undertaken to assess accuracy and completeness, and variables were recoded as required for analysis. Descriptive statistics (frequencies and percentages for categorical variables, and mean, median and interquartile range

for continuous variables) were used to describe the demographic and academic characteristics. Logistic regression was used to determine the demographic and academic predictors of AE quiz completion and essay assessment (Wright, 1995).

Five dichotomous variables were entered and measured using a logistic regression model, namely a) GPA (7 point GPA) ( $\geq 4$  or  $< 4$ ); b) cumulative hits on the LMS ( $> 4$  hours or  $< 4$  hours); c) age ( $< 27$  years or  $\geq 27$  years); d) gender (male or female); and e) country of birth (Australian born or born outside Australia). The results were presented as an adjusted odds ratio with 95% CI. Additionally, other measurements such as Nagelkerke's pseudo- $R^2$  and Hosmer-Lemeshow test were used to explain the total logistic model variance and assess the model's goodness-of-fit (Paul et al., 2013).

## **Phase 2 Qualitative**

Phase 2 gathered qualitative data to explore the perceptions and experiences of students who did or did not use the AE as a feed-forward strategy (Objective 2).

### **Sampling and recruitment**

Students were recruited for interviews using a stratified sampling method (Mertens, 2015). Using the Phase 1 data, students were stratified and grouped according to their hit rate (measured in hours) on the online LMS site and their GPA (Figure 3.2). Following stratification, students from each group were contacted and invited for an interview. To ensure maximum variation, at least two students from each stratum were sought to participate in the first instance.

Students were contacted using the telephone details provided at enrolment and collected with other administrative data. They were called consecutively in the order on the stratification spreadsheet until sufficient participants agreed to participate in the interviews for data saturation to be achieved. Data saturation was considered to have occurred when no new ideas or data were yielded during the data collection (James et al., 2010).

- |    |  |
|----|--|
| 1. | Low hit rate (<2.5 hrs) and low GPA (<3.5)           |
| 2. | Low hit rate (<2.5 hrs) and moderate GPA (3.5 – 5.4) |
| 3. | Low hit rate (<2.5 hrs) and high GPA (>5.4)          |
| 4. | High hit rate (>6.9 hrs) and low GPA (<3.5)          |
| 5. | High hit rate (>6.9 hrs) and moderate GPA (3.5-5.4)  |
| 6. | High hit rate (>6.9 hrs) and high GPA (>5.4 )        |

**Figure 3.2** Stratification of participants for interviews

### Data collection

A semi-structured interview approach was chosen because the open-ended questions allowed the participant to provide a unique account of their personal experiences but the presence of interview questions provided a framework for the novice researcher (Rowley, 2012). Semi-structured interviews use a predetermined set of questions with prompts if required, which allowed the interviewer to adapt the interview structure to elicit information to answer particular research questions (Doody & Noonan, 2013). This allows the researcher to explore an individual's experiences, opinions and attitudes (Rowley, 2012). The semi-structured approach also allows the interviewer the flexibility to probe the participant to explore their ideas and perceptions (Rowley, 2012). This method, therefore, clearly complements the quantitative data.

Semi-structured interviews are advantageous because they allow the interviewer to explore issues that arise spontaneously during the interview, but also allow the interviewer to return the interviewee back to the topic if required (Doody & Noonan, 2013). Using a semi-structured interview approach can support novice interviewers because the questions may be prepared and checked for credibility by experienced researchers before the interview was conducted (Rowley, 2012).

Using semi-structured interviews has disadvantages. These may relate to interviewer technique and experience levels and include the inability of a novice interviewer to elicit detailed information particularly when the interviewee may need time to expand on their thoughts and/or may not be aware when or how to best use prompts (Doody & Noonan, 2013). Therefore sufficiently rich data may not be gathered. Further, the interviews themselves are resource-intensive because it is unknown what volume of information may be elicited during the interview and data analysis may be time-consuming (Hove & Anda, 2005).

### Interview guide

The interview questions were devised to explore participants' experiences when using the AE. The questions were derived from a critical literature review, consultation with key experts and discussions in the project team (Doody & Noonan, 2013). During the interviews, prompts and probing questions were used to elicit further detail where required. For example, when participants were asked about their experience using the AE a prompt or probing question used by the interviewer was 'Can you tell me more about how you used the AE?'.

1. Did you use the AE on the HV2 vUWS site?
2. Can you tell me a little bit about your experience using the AE?
3. What did you think about the layout and design of the AE?
4. What did you think about the content of the AE?
5. Has the AE helped learn how to structure your essay? Why/why not?
6. What new knowledge did you gain from reading/using the AE?
7. How did you personally use the AE when writing your essay?
8. How do you think the use of AEs could be improved in the future?
9. Can you see the AE being useful in other units you are studying? Why/why not?
10. If you did not use the exemplar, why didn't you use the AE?

**Figure 3.3** Interview Guide

### Data collection

Participants were offered the opportunity for a face-to-face interview at their home campus or a telephone interview at a mutually convenient time. As potential participants came from a large geographical area and limited time was available, this was the only feasible strategy to facilitate broad participation. Whilst face-to-face interviews allow the interviewer to see the participants' body language, telephone interviews are widely used where resource constraints preclude face-to-face meetings or there is a wide geographical spread (Cachia & Millward, 2011). Telephone interviews were a convenient and practical method of obtaining data from participants in this study (McIntosh & Morse, 2015).

All interviews were undertaken by the MPhil candidate, after the students had submitted their essay, and before the marks and feedback were returned to the student. This strategy aimed to minimise the opportunity for student responses to

be biased by the mark awarded. Before commencing the interviews, written informed consent was obtained either electronically via the student's university email account or by hard copy when the interviews were conducted face-to-face. Participants were advised that the interview would be digitally audio-recorded to facilitate transcription and analysis. Following each interview, the interviewer recorded field notes about their perceptions of the interview and pertinent issues that were raised. The first three interviews were audited by an experienced qualitative researcher to provide critical feedback about the interview technique to guide and support the interviewer during subsequent interviews.

### Data analysis

Audio recordings of interviews were transcribed by an external transcription company. The verbatim transcripts were then analysed using a process of thematic analysis as described by Braun and Clarke (2006) (Figure 3.4). Each transcript was initially checked against the audio recordings to ensure they were correctly transcribed. All interviews were read and re-read multiple times to familiarise the researchers with the data. Points of interest and common ideas were identified and sorted into potential themes and sub-themes. These themes and sub-themes were reviewed, revised and named (Braun & Clarke, 2006). Pseudonyms are used instead of participants' real names to protect their identity.

Step 1.	Familiarise with data	Transcripts read and re-read to familiarise with data
Step 2.	Generate initial codes	Points of interest identified
Step 3.	Search for themes	Common ideas were identified
Step 4.	Review themes	Preliminary themes reviewed, modified and developed
Step 5.	Define themes	Themes were further refined to identify the 'essence'
Step 6.	Write-up	The results of thematic analysis reported

**Figure 3.4** Six steps of thematic analysis (Braun & Clarke, 2006)

### Rigour

Rigour was established using the criteria described by Lincoln and Guba (1985), namely; credibility, transferability, dependability and confirmability. Prolonged engagement was used to establish credibility (Lincoln & Guba, 1985). The primary researchers were academics teaching and marking within the unit and prepared the AE intervention in conjunction with academic literacy experts. As a

result, the researchers had a good understanding of the complexity of the setting and dynamics in which the study took place. Additionally, peer-debriefing between the student and supervisors provided an opportunity to explore and test ideas about the conduct of the study and analysis.

Transferability was demonstrated through the use of thick description (Lincoln & Guba, 1985). That is, there is a clear description of the setting and participants and verbatim quotes are used to demonstrate how the analysis has been drawn from the data. Finally, dependability and confirmability were established via an audit trail, triangulation and reflexivity (Lincoln & Guba, 1985). The audit trail provides a clear description of the steps taken during the study. These details have been included in the study reporting. Triangulation in this study involved the use of multiple data sources from both qualitative and quantitative methods. This provided a richer description of the situation than would have been possible with either method alone. Throughout the candidature, the student used critical reflection and debriefing to explore how their biases may impact the study.

### **Ethical considerations**

Prior to data collection commencing approval for the conduct of the study was gained from the Human Research Ethics Committees at Western Sydney University (Approval No. H10803) and the University of Wollongong and the Illawarra Shoalhaven Local Health District (Approval No. NSA15/14)(Appendix B). Given the nature of this Project, and the relationships between the research team and participants, several ethical issues needed to be addressed when planning this project. These are explored below.

### ***Informed consent***

Consent for Phase 1 was considered implied unless the student withdrew from the study. Study information, including a description of the withdrawal process, was communicated to potential participants via their student email account. The main reason for using this approach was to evaluate the effectiveness of the AE as an embedded assessment support strategy for all students, not just students who would respond to an invitation to participate in a study. This kind of consent process was considered appropriate given the de-identified and aggregated nature of the data collection and the risks to participants from participation.

During Phase 2, potential participants were provided with study information about the interviews and an opportunity to ask any questions before written consent was obtained. In addition to this written consent, verbal consent was sought and provided by each participant before the interview commenced.

### ***Relationships between staff and students***

The impact of relationships between staff and students was eliminated by implementing two strategies. Data collection for both phases were undertaken following submission of the essay and before the release of marks. The LMS data was downloaded by a member of the research team who was not involved in any marking within the unit. The MPhil candidate who undertook the interviews did undertake essay marking within the unit. However, they were not the marker of any essays submitted by interview participants. Before each interview, the interviewer checked that they did not mark the essay of the participant.

### ***Confidentiality***

Only de-identified participant and academic data were reported in this study. Before transcription, the audio files were labelled with a pseudonym so that when the data was analysed the researchers did not know the identity of the interviewee. Student data were coded to maintain confidentiality. To protect the privacy of participants, identifiable details (names, student ID) were removed as soon as data linkage had occurred.

### ***Storage of information***

Data were largely collected in an electronic format, with few paper files of consent or printed transcripts. These data were stored on a password-protect hard drive which was secured in a locked cabinet with the hard copy files. Information will be stored for five years following dissemination of results as per NHMRC policy and guidelines for responsible conduct of research (National Health & Medical Research Council., 2011).

### ***Conclusion***

This chapter has outlined the research methodology and methods used within the two phases of the study. Data collection and analysis was also discussed. In addition, the ethical considerations in the conduct of the study were detailed in this chapter. The next two chapters present the study findings.

# **Chapter 4:**

# **Quantitative Findings**



### Chapter Introduction

This chapter presents the quantitative findings of this study (Paper 2). This paper has been published in *Nurse Education Today* (Impact factor 3.442, Q1)(Appendix D) as;

Carter, R., Halcomb, E., Ramjan, L., Wilson, N., Glew, P., & Salamonson, Y. (2019). Does the use of annotated exemplars by nursing students predict academic performance? A cohort study. *Nurse Education Today*, 80, 34-39.

Elsevier grants permission for all students to include publications from its journals in a thesis.

### Abstract

**Aims:** To examine the usefulness of the AE as an academic support strategy, and explore the characteristics of students who were more likely to engage with this support tool. Additionally, to identify if there was any influence on the academic performance in the assessment activity among those who engaged with the AE.

**Background:** AEs have the potential to target students *en masse* and provide meaningful, task-specific comments that guide students before assessment submission. Effective strategies to support student learning are needed as nursing students are increasingly entering their studies from non-traditional backgrounds.

**Design:** A cohort study was used to collect administrative data, academic grades and AE usage statistics.

**Setting:** A large multi-campus university in NSW, Australia during Spring 2016.

**Participants:** Second-year undergraduate students enrolled in a single unit in the Bachelor of Nursing Program.

**Methods:** Quantitative data related to marks, grades and usage information; and demographic data and contact details were extracted from the online LMS and student electronic records.

**Results:** Of the 1120 students enrolled in the unit, 49.5% of students engaged with the AE. Students more likely to engage with the tool were older, female, born outside of Australia and had higher hit rates on the online learning management site. Of those who engaged with the AE, there was no demonstrated increase in assessment marks.

**Conclusion:** Student dissatisfaction and lack of engagement with feedback indicates that it is essential that strategies are developed and implemented that are both engaging and effective. The benefits of the AE were not reflected in student marks but remains unknown how students may have performed in the essay if the AE had not been provided. Further research is required to explore the reasons why students did not engage with the AE and, for those who did, why the intervention did not impact upon assessment marks.

### **Introduction**

Feedback is a critical component to improve student learning (Crimmins et al., 2016) and is viewed by some as an essential indicator of teaching effectiveness (Wygall et al., 2014; Zhang & Zheng, 2018). Nevertheless, assessment feedback has consistently received criticism from students in higher education (Agius & Wilkinson, 2014). In addition to the poor quality of assessment feedback (Hendry et al., 2016; Pitt & Norton, 2017; Scoles et al., 2012), other reasons students provide for their low ratings include timeliness of feedback (Li & De Luca, 2014) and paucity of suggestions for improvement (feed-forward) that can be applied to subsequent assessments (Vardi, 2013). Not surprisingly, students often undervalue the written comments provided by the assessors, instead only focusing on the marks received (Robinson et al., 2013).

For feedback to effectively promote learning, students must engage and act on comments and suggestions provided by assessors (Boud & Molloy, 2013). This will not only improve the quality of future assessment tasks but also develop their professional practice following graduation (McKevitt, 2015; Pitt & Norton, 2017; Sadler, 2010). In the era of cost containment and budgetary constraints in higher education, academics are often restricted by a lack of time to provide individualised, targeted assessment feedback (Carless et al., 2011; Robson et al., 2012). Furthermore, higher education is increasingly reliant on sessional staff who are often less experienced in providing quality, constructive and consistent written assessment feedback (Andrew et al., 2010; Grainger et al., 2016; Peters et al., 2011). One approach to address this is to design a 'front-end' support strategy that would meet the needs of students (Scoles et al., 2012).

## Background

Annotated exemplars are tools that have the potential to provide students with quality feedback, increase student engagement and promote student learning (To & Carless, 2015; Wygal et al., 2014; Yucel et al., 2014). Handley and Williams (2011) define exemplars as previous assignments or examples of the completed assessment task that are annotated with feedback. Annotating exemplars with comments allows students to make sense of the exemplar and identify how these comments can be applied to correctly structure their own written assessment task using the mock example provided (Quinton & Smallbone, 2010). The intention is to guide students on how to use feedback received from one assessment and to transfer these skills to future assessment tasks (Hendry et al., 2016). Additionally, the student is prompted to construct the assessment task correctly the first time by applying learning derived from exemplars. This strategy has been labelled a 'feed-forward' approach (Scoles et al., 2012).

Annotated exemplars allow students to receive meaningful and task-specific comments about the assessment task. The provision of online exemplars facilitates access to this information by large cohorts of geographically dispersed students (Handley & Williams, 2011) at any time (Baker & Zuvela, 2013) and caters for diverse student groups (Yucel et al., 2014). There are also benefits for staff and students, such as reduced workload (Smyth et al., 2012), scaffolding student learning (Carter et al., 2018) and improved student performance (Hendry & Jukic, 2014; Wimshurst & Manning, 2012; Yucel et al., 2014).

As the student population enrolled in higher education continues to diversify (Bradley, 2008), effective strategies to support learning will need to evolve and embrace this diversity (Devlin & Samarawickrema, 2010). Thus, feed-forward in addition to feedback processes need to be designed to engage diverse students and support their various learning needs. An AE may have the potential to influence learning in this way as it is a feed-forward strategy with several benefits not limited to reducing misinterpretation and increasing understanding of assessment expectations. Students often have difficulty understanding and responding to assessment requirements (Iacobucci et al., 2015) and exemplars provide an illustration of how to answer an assessment question. Model answers, such as

exemplars, have proven to be effective in increasing marks in summative assessment (Hendry & Jukic, 2014; Newlyn & Spencer, 2010; Wimshurst & Manning, 2012).

Socio-demographic factors have been recognised to influence student engagement in higher education. Gender, age, country of birth and grade point average (GPA), have proven to be significant predictors of engagement and academic performance in several studies (Kenny et al., 2011; Rubin et al., 2018; Salamonson et al., 2011; Zheng et al., 2014). Female students outperform male students in university courses in general (Conger & Long, 2010). The issues for older students are multi-factorial. Mature age students are more likely to have limited academic skills; be concerned about their lack of background knowledge (Buultjens & Robinson, 2011) and have limited technology skills (Kenny et al., 2011). Students born in a country other than which they are studying are more likely to underperform (Zheng et al., 2014). Lastly, students with a higher GPA are likely to be more engaged learners (Owston et al., 2013) and perform better than others for a variety of reasons including having better study skills, superior time management and being more motivated and committed learners (Sheard, 2009).

However, little is known as to whether there is a relationship between student characteristics and the utility of using AEs. This information is crucial to evaluate the effectiveness of this assessment support strategy and whether it meets the needs of 'the changing face' of student diversity in higher education. With increased emphasis on blended and online learning approaches there is less face-to-face interaction between students and nursing academics. Therefore the need for a feed-forward approach is even more important for undergraduate nursing students (Croft et al., 2010; Sweeney et al., 2016). While AEs have been utilised across various disciplines in the undergraduate setting with some success (Hendry & Anderson, 2013; Hendry et al., 2012; Hendry et al., 2016; Wimshurst & Manning, 2012) and this strategy has been advocated for use in nursing (Carless, 2006), there is little evaluation of its use in nursing education to date (Carter et al., 2018).

The aim of this paper is to report the usefulness of AEs in a large, multi-campus cohort by: i) examining the relationship between uptake and engagement with an

AE and student's socio-demographic profile and; ii) determining if use of the AE has a positive impact upon academic performance.

## **Methodology**

### ***Study design***

This prospective follow-up study was the first phase of a sequential explanatory mixed-methods study. Within this phase, administrative data and grade information as well as use of the AE was collected. A second phase collected qualitative data from students about the experiences of using the AE. Due to the volume of data, these qualitative data are reported separately (Carter et al., 2021).

### ***Population and setting***

Participants were second-year undergraduate students enrolled in a single subject in the Bachelor of Nursing Program at a large university in NSW, Australia during Spring semester 2016. This subject focused on disability and chronicity in health and wellbeing, with students exploring case scenarios across the lifespan related to disability (e.g. Down syndrome) and chronic illness (e.g. diabetes, epilepsy, asthma or thyroid dysfunction). The Unit had approximately 1100 students enrolled across multiple campuses. Two summative assessments were required to complete the subject; one 1500 word essay and a final written exam. Each assessment was worth half of the total marks available. To achieve an overall pass grade a student had to achieve an aggregate mark of 50%.

### ***Educational intervention***

The AE was uploaded to the subject site on the online LMS by the Subject Coordinator. The AE was a full version of the assessment essay, addressing the same essay question. However, while the assessment task required students to write an essay response about a man with Down Syndrome and diabetes, the AE was related to chronic heart failure in a man with an acquired brain injury. The exemplar was written by two academic staff, modelling the expected structure and content for the essay, before being annotated with comments by a linguistics expert.

Students were alerted three times by email and via the LMS that the resource was available. Learning activities using the AE were embedded within tutorial classes. These learning activities required students to access the AE, explained how it could

be used, provided practice using the exemplar to write an essay paragraph and allowed tutors to respond to student enquiries. Once students had engaged with the AE they were requested to undertake a 10 item multiple choice quiz about the accessibility and ease of use of the AE. These quiz results were used to record student engagement with the AE.

### **Data collection**

Quantitative data including demographic information such as student identification number, age, gender, country of birth and GPA were extracted from student records. Student marks, attempts at AE quiz and LMS usage information (hit rates on the online eLearning platform) were collected about students by downloading from the LMS site (Blackboard Learn 9.1 Q2 2018 CU1)(Figure 4.1) (Blackboard.com, 2018). This information was extracted to identify the degree to which students engaged with the AE (attempted AE quiz); identify the characteristics of students who engaged with the AE (gender, age, GPA, previous study, overseas-born) and to determine if there was an improvement in essay mark (mark >54%).

1. Student progress rates in units and courses
2. Unit grade distributions, for example:
  - collection of student work
  - assessment feedback
3. Demographic data gathered at enrolment, for example:
  - language spoken at home, low socio-economic status,
  - first in family status, basis of admission (current school leaver; non-current school leaver categories such as Technical and Further Education articulation,
  - recognition of prior learning both in Australia and overseas and HSC (Higher School Certificate) performance in specific subjects.

**Figure 4.1** Institutional Data

### **Ethical considerations**

Approval was granted by the University of Wollongong Human Research Ethics Committee before contacting the students or retrieving study data (Approval No. H10803). An opt-out approach was employed for participant recruitment. At the commencement of the semester, students were contacted via their student email account and informed of the study. They were advised that their participation was voluntary, and they could withdraw at any time. They were also provided with a copy

of the participant information sheet and an 'opt out' email link if they wished to withdraw from the study. Despite these interventions, no student opted out of this research. As all data were aggregated and no individual student was able to be identified within any data arising from the project.

### ***Data analysis***

Data were imported into the SPSS version 22 for analysis (IBM, 2013) and matched using the student number as a unique identifier. Data were then checked manually for accuracy and completeness before being analysed using a combination of descriptive and inferential statistics (Nagelkerke's  $R^2$  and Hosmer-Lemeshow goodness of fit test)(Menard, 2018).

To answer the research questions five dichotomous variables were entered and measured using a logistic regression model. These variables were: a) GPA (7 point GPA) ( $\geq 4$  or  $< 4$ ); b) cumulative hits on the LMS ( $> 4$  hours or  $< 4$  hours); c) age ( $< 27$  years or  $\geq 27$  years); d) gender; and e) country of birth (Australian born or born outside Australia). The median was used as a measure for all variables except country of birth and gender. Similarly, the essay mark was also dichotomised at the median score (up to 54% or  $> 54\%$ ). A median split is just as effective as a continuous variable and may be preferred as it may have a narrower margin (Iacobucci et al., 2015). Using country of birth as a split demonstrates the diversity of the cohort and is a suitable variable to measure as students born outside of Australia underperform academically compared to Australian born students (Salamonson et al., 2012).

Following variable recoding, a combination of descriptive and inferential statistical analyses were then undertaken. Descriptive statistics (frequencies and percentages for categorical variables, and mean, median and interquartile range for continuous variables) were used to describe the demographic and academic characteristics. Logistic regression analyses were used to determine the demographic and academic predictors of: i) completion of the AE quiz; and ii) high academic performance in the essay assessment. The results were presented as adjusted odds ratio with 95% CI. Additionally, Nagelkerke's pseudo  $R^2$  was computed to explain the total logistic model variance, and Hosmer-Lemeshow test to assess the model's goodness-of-fit.

## Results

Most of the 1120 enrolled students (n=929; 82.9%) were female and their median age was 28.5 years (IQR: 21.9-33.0; range: 19-63 years) (Table 4.1). Two thirds of students (n=750; 67.0%) were born outside Australia, with 51.1% (n=572) speaking a language other than English at home. Just under half of the students (n=554; 49.5%) attempted the AE quiz. The median for the cumulative duration of time spent on the LMS subject site was 4 hours (IQR: 1.8-7.7; range: 0-47.95). The median GPA of students prior to this subject was 4 (IQR: 3.4-5.0; range 0–7). The median essay mark was 54% (IQR: 40.0-64.0; range 0%–96%).

**Table 4.1** Demographic and academic characteristics

Variable	n (%)
Age, mean years (Range: 19-63yrs)	28.5
Gender	
Male	191 (17.1)
Female	929 (82.9)
Country of birth	
Australia	370 (33.0)
Born outside Australia	750 (67.0)
Language spoken at home	
English only	548 (48.9)
Other than English	572 (51.1)
Enrolment category	
International student	322 (28.8)
Domestic student	798 (71.3)
Annotated exemplar quiz attempts	
Attempted quiz	554 (49.5)
Did not attempt quiz	566 (50.5)
GPA at start of semester, mean (IQR) (Range: 0-7)	4.2 (3.4-5.0)
Essay mark (/100), mean (IQR) (Range: 0-96)	51.6 (40.0-64.0)
Course activity cumulative hits LMS, hours, mean (IQR) (Range: 0-47.9 hrs)	5.6 (1.8-7.7)



### Predictors of engagement with AE

Five variables were included in the logistic regression model to examine for predictors of engagement with the AE. The four significant predictors of high engagement were: i) those born outside Australia (OR: 2.81, 95% CI: 2.13-3.72); ii) female gender (OR: 1.96, 95% CI: 1.40 to 2.75); iii) those older than 27 years (OR: 1.87, 95% CI: 1.44 to 2.41); and iv) those with high (>4 hours) cumulative hit rates on LMS (OR: 1.57, 95% CI: 1.22 to 2.03). The chi-square statistic of the Hosmer-Lemeshow goodness of fit test was 8.424, 8 df ( $p = 0.393$ ) indicating adequate fit. The full logistic regression model is shown in Table 4.2.

**Table 4.2** Demographic and academic predictors of quiz completion

Variables	Coefficient (B)	Standard error	Adjusted odds ratio (95% CI)	$p$ value
High GPA ( $\geq 4$ )	-0.02	0.13	0.98 (0.76-1.28)	0.892
Cumulative hit on LMS (> 4 hours)	0.45	0.13	1.57 (1.22-2.03)	0.001*
Age median: >27 years	0.62	0.13	1.87 (1.44-2.41)	<0.001*
Gender: Female	0.67	0.17	1.96 (1.40-2.75)	<0.001*
Country of birth: Overseas-born	1.04	0.14	2.81 (2.13-3.72)	<0.001*

\* denotes  $p$  value is < 0.05

### Predictors of a high essay mark

To examine differences in performance in the essay assessment, six variables were included in the logistic regression model. The three significant predictors of high (>54%) essay mark were: i) high GPA (OR: 3.45 95% CI: 2.64 to 4.51); ii) cumulative hit rates on LMS (OR: 1.52, 95% CI: 1.17 to 1.97); and iii) being Australian-born (OR: 1.67, 95% CI: 1.26 to 2.21). Students' attempts of the AE exemplar quiz, gender and age did not emerge as a significant predictor of high essay mark. The Nagelkerke's  $R^2$  value was 0.150, the chi-square statistic of the Hosmer-Lemeshow goodness of fit test was 14.906, 8 df ( $p = 0.061$ ) (Table 4.3).

**Table 4.3** Demographic and academic predictors of high (>54%) essay mark

Variables	Coefficient (B)	Standard error	Adjusted odds ratio (95% CI)	p value
Attempted AE Quiz: Yes	0.05	0.14	1.05 (0.80-1.37)	0.727
High GPA ( $\geq 4$ )	1.24	0.13	3.45 (2.64-4.51)	<0.001*
Cumulative hit on LMS (> 4 hours)	0.42	0.13	1.52 (1.17-1.97)	0.002*
Age: >27 years	0.06	0.14	1.06 (0.81-1.39)	0.665
Gender: Female	0.30	0.17	1.34 (0.96-1.89)	0.090
Country of birth: Locally-born	0.51	0.15	1.67 (1.26-2.21)	0.001*

\* denotes  $p$  value is < 0.05

### Discussion

This study aimed to examine the effectiveness of AE as an academic feed-forward support strategy for nursing students. In addition, this study also sought to examine if specific student demographic groups were more likely to engage with the AE and investigate its impact upon academic performance. Only approximately half (49.5%) of the student cohort engaged with the exemplar, which was surprisingly low. Although reasons for a lack of engagement were not collected from students in this study, possible explanations could be a lack of student motivation which has previously been reported (Scoles et al., 2012). Furthermore, the impersonal nature of this online support and the lack of interactiveness in the online AE resource could have also contributed to the lack of student engagement (Croft et al., 2010).

Although only slightly less than half of the student cohort engaged with the AE, those who used this learning tool were also more likely to engage with the subject online LMS, were older, female and born outside Australia. Predictably, higher subject online LMS engagement was positively associated with AE quiz attempt, which was not unexpected as high online LMS engagement would increase the likelihood of students locating the exemplar and completing the AE quiz. Conversely, possible explanations as to why students did not engage with the AE could be due to the design in the LMS. Ability to navigate the LMS may have reduced the likelihood of students with limited computer literacy stumbling on the AE resource. Some students may have lacked motivation or the time required to engage with the AE in

the LMS due to other competing priorities such as other subjects of study and undertaking clinical placement (Tomas et al., 2015).

Compared to younger students, those who were older were more likely to use AE. Factors that could have contributed to this finding include recognition of their personal learning needs as this group of students were more likely to be less confident with their academic abilities (Stone, 2008). For instance, many mature-age students are less confident with their study skills and have been reported to invest more study time in higher education (Kenny et al., 2011).

Female nursing students in this study were more likely to use AE, which was not unexpected as females have been identified to adapt more easily to the contemporary higher education's discourses (Sheard, 2009), and consequently are more likely to outperform their male counterparts (Severiens & Ten Dam, 2012; Wan Chik et al., 2012). Female students have also been reported to have the added advantage of having better non-cognitive skills, such as organisation, self-discipline, attentiveness, dependability and help-seeking behaviour (Conger & Long, 2010; Wan Chik et al., 2012). It has been suggested that women are also more motivated towards and readily engage with academic goals and activities (Sheard, 2009). The findings of this study support the idea that different support strategies may be required for male and female students. This study also showed that nursing students born outside of Australia were more likely to use and engage with the AE, which was perhaps a reflection of cultural norms, values, and beliefs of a sizeable proportion of those born overseas (Di Domenico et al., 2015).

It was anticipated that greater engagement with the AE would be related to an improvement in academic performance. However, the results of this study demonstrated that those who used the AE did not perform better than those who did not use the AE and may be attributed to the increased use of a blended and online learning approach. Other researchers report similar findings, Yucel et al. (2014) who found there was no demonstrated improvement in final mark and with Hendry and Anderson (2013) where students had a positive view of the exemplar, demonstrated no improvement in performance. In contrast, Newlyn and Spencer (2010) reported an improvement in the mean marks for all students exposed to exemplars compared to those who were not. Although this remains open to conjecture, possible reasons

why that may have impacted upon essay performance were that the essay was due early in the semester (week 4) and the participants were preparing for a four-week clinical placement and had little time to prepare.

Although engagement with the AE was not a predictor of high essay marks, a myriad of key factors were shown to contribute to essay performance, which included previous GPA and high engagement with the subject online LMS. Another consideration is that while there was no demonstrated improvement in marks, the study did not predict underperformance or identify students who did not receive adequate support. With the massification of higher education, identifying those students who do require support may be missed (Vardi, 2013). This study shows that feed-forward interventions, such as AEs, provide additional learning support by delivering detailed evidence of what is required before submission (Scoles et al., 2012). Further investigation is needed to explore innovative approaches for the delivery of AE as a feed-forward strategy using the LMS.

### ***Limitations and recommendations for future research***

This study was undertaken using a single assessment task within one subject of study and did not include a control group. It is acknowledged and therefore possible that some students may have attempted the AE quiz but not engaged with the AE while other students may have used the AE, but not attempted the quiz resulting in greater engagement than that recorded. We were unable to determine if students who did achieve a higher essay mark would have done so if they had not engaged with the AE. Lastly, to ascertain that students were not just copying from the AE, we would need to test this using another assessment task without AEs.

### **Conclusion**

Quality feedback is essential for learning. Student dissatisfaction, lack of engagement with traditional approaches to feedback and growing numbers of nursing students entering programs via non-traditional pathways mean that it is essential that strategies are developed and implemented that are both engaging and effective. Just under half of the students enrolled in the subject used the AE. Those more likely to engage with the AE were more engaged with the LMS, female, older, and born outside Australia. However, the use of the exemplar was not reflected in the student's essay marks.

This study highlights the need for a qualitative investigation exploring the reasons related to student engagement with the AE and students' experiences using this tool. Consideration also needs to be given to strategies that will increase the visibility of resources and improve student uptake and engagement with AEs and other feed-forward strategies. This further investigation should also consider the impact of these strategies on essay marks.

# **Chapter 5:**

# **Qualitative Findings**

## Chapter Introduction

This chapter presents a publication that presents the qualitative findings from phase two of this study. This paper has been submitted for peer-review in *Nurse Education Today* (Impact factor 3.442, Q1) as;

Carter, R., Ramjan, L., Halcomb, E., Wilson, N., Glew, P., & Salamonson, Y. (2019). "It keeps me on track": Undergraduate nursing students' experiences of using annotated exemplars – A qualitative study. *Nurse Education Today*, under review.

## Abstract

**Aims and objectives:** This study aimed to explore students' experiences of using an AE to complete an assessment task.

**Background:** Assessment is used to both inform educators about students' knowledge and understanding, as well as to measure student achievement. Although feedback remains useful for students to explain their assessment performance, feed-forward strategies provide students with a clear sense of assessment standards and expectations. Yet, little is known about students' experience of using feed-forward tools, such as their experience of using AEs.

**Design:** A descriptive qualitative study.

**Methods:** Using a stratified sampling procedure, twelve participants were interviewed about their experiences of using a purpose-built AE with meta-language support, developed to assist students with their assessment task. Interviews were audio-recorded, transcribed and analysed using thematic analysis. The COREQ checklist was used in the reporting of this study.

**Results:** Two-thirds of participants used the AE, describing the tool as being a versatile resource to assist them in completing their assessment task. These participants used the AE as a blueprint to structure their essay, as a step-by-step guide, and to check they were on the right track. Misconceptions about the AE was a contributing factor for not using this tool.

**Conclusion:** The purpose-built AE with meta-language support was a useful tool to assist students with the assessment task. Uptake of this tool could be improved by engaging both academic staff and students to optimise student use.

**Relevance to clinical practice:** Knowledge gained from this study will inform future implementation of AEs as a feed-forward strategy to support students as they progress through an undergraduate nursing program.

### **Introduction**

Assessment is an important tool to measure student learning (Grainger et al., 2016). It not only provides a foundation to inform student learning, but is also a measure of student achievement, providing evidence that learning has occurred (Hernández, 2012). However, students are often challenged when completing assessment tasks because they may not fully understand the task requirements. Despite efforts to make assessment task directions as clear, objective and as precise as possible, many students do not understand what is required because they do not have the skills to unpack the question and answer it appropriately (Sadler, 2010). To assist with addressing assessment requirements, students are often referred to marking standards and criteria (McKevitt, 2015).

A key strategy used by academics to explain assessment requirements is through standard-based criteria (Hendry & Anderson, 2013). These criteria aim to provide clarity for both the marker and student (Bell et al., 2013). Despite the availability of standard-based criteria, students continue to have difficulties interpreting these requirements, with some reporting them to be too abstract (Hendry et al., 2012; Iacobucci et al., 2015). One strategy to unravel the perceived mystique for undergraduate students is through the use of exemplars (Carless & Chan, 2017). Exemplars are an important tool for clarifying expected standards and quality of work as they demonstrate for students explicitly what they need to do to meet assessment requirements (Newlyn & Spencer, 2010; Scoles et al., 2012).

Exemplars are available in various forms. Two commonly used approaches are the use of samples of previous students' work, and purpose-built model answers developed by academics (Carless & Chan, 2017; Dixon et al., 2020). Exemplars targeting school students often have an additional level of support that includes meta-language, which is the language used to talk about language (Nordquist, 2020). Meta-language support has been reported to be particularly beneficial to develop academic language for students with English as an additional language, as it explicitly focuses on language usage (Schleppegrell, 2013).



In countries such as the United Kingdom, the United States of America, Canada, New Zealand and Australia, there have been significant increases in the number of students from CALD backgrounds commencing in university programs (Murray & Muller, 2019). More students from CALD backgrounds are entering undergraduate nursing programs with English as an additional language (Glew et al., 2019), with some gaining entry through non-traditional entry pathways (Chung et al., 2014). Not surprisingly, these students may not have the assumed English literacy and language skills for tertiary studies, which places them at an increased risk of academic underperformance (Chung et al., 2014). Hence, in developing purpose-built model answers to support these students, it may also be useful to provide meta-language support. Whilst there is some evidence regarding the usefulness of exemplars at higher education, little is known about the perceived benefits of embedding meta-language support into AEs in undergraduate nursing programs (Carter et al., 2018).

### **Background**

Feedback promotes active learning and deeper understanding (Nicol, 2010; Zhang & Zheng, 2018). For this to be effective however, feedback must be timely and meaningful to scaffold student learning (Cathcart et al., 2013) rather than as a means to justify loss of marks. An effective strategy that promotes the engagement of students is the 'feed-forward' strategy; targeting forthcoming assessments using exemplars (Wimshurst & Manning, 2012). Feed-forward has been defined as a process in which students attempt an assessment task, receive feedback and then apply the new understanding to future assessment tasks (Carless, 2006; Wimshurst & Manning, 2012). Although feed-forward strategies have been advocated in nursing (Carless, 2006) and across disciplines, they have been presented in various formats. For example, as model answers and/or asking the student to provide peer feedback (Scoles et al., 2012; To & Carless, 2015) or have required students to revise work based on feedback and resubmission (Robson et al., 2012).

By annotating feed-forward exemplars with comments, feedback is meaningful and can improve a student's academic writing (Hendry et al., 2011; Quinton & Smallbone, 2010). The AE guides students in the writing process by providing a

tangible example (Rae & Cochrane, 2008), and scaffolds their learning (Hendry & Anderson, 2013; Newlyn & Spencer, 2010). Although the benefits seem evident, in their review of the literature Carter et al. (2018) found little research available regarding student use of AEs, particularly in nursing.

### **Aim**

This study aimed to explore nursing students' experiences of using an AE as an academic support tool and explore students' perceptions of the benefits and challenges in the use of this support strategy.

### **Methods**

This paper reports the second phase of a larger sequential explanatory mixed-methods study. The first phase collected administrative data of nursing students, and the second phase involved individual interviews with students. The reporting of this study was guided by the COREQ checklist (Tong et al., 2007).

### ***Intervention: AE as an academic support tool***

Students were provided with a sample essay based on a case study of a different topic to demonstrate the structure and language needed for their essay assessment. The sample essay was written by two academics (Rebekah Carter & Nathan Wilson) with content expertise and experience teaching in this unit. It was broken into three segments; introduction, main body and conclusion, with a short dialogue explaining the components required for each section. The exemplar was then reviewed by a linguistic expert (Erica Matruglio), who itemised and categorised each sentence separately, using different coloured highlighting and annotations at the side to provide further details and explanations. These sections were inserted into a table with highlights and annotations. The annotations, including the meta-language support used, keywords and quotes were illustrated within the exemplar (Figure 5.1).

### ***Study setting***

The study was conducted across a large multi-campus nursing school in New South Wales, Australia. The study setting is characterised by its geographical spread and diversity, enrolling students from more than 150 different culturally and linguistically diverse backgrounds (Western Sydney University, 2020).

Students enrolled in an undergraduate theoretical unit of study related to disability and chronic conditions in the Bachelor of Nursing program were the focus of this study. This second-year unit, in a 3-year program, had an enrolment of 1100 students across three campuses. Assessment items consisted of one formative assessment, a 1500-word essay, the focus of this study, and a summative examination conducted at the end of the semester. Both assessments had an equal weighting of 50% each. To successfully complete this unit, students needed to achieve an aggregate score of 50 out of 100 marks.

Criterion 2: Using the ICF Model, discuss how the adult's activity and participation across the lifespan are potentially affected by having intellectual disability and diabetes. (10 marks)

Structure	Text	Notes
Topic sentence	The ICF is an international framework based on the principles of primary health where the person's environment and participation in activities is considered central to their health and wellbeing (WHO, 2002).	The topic sentence is often the place where new concepts are introduced and defined.
Elaboration	The ICF is designed to enable the measurement and impact of the interaction of both health and disability in a person. Central to this interaction are three core domains that enable practitioners to appreciate the extent of a person's disability: (1) functional impairment, (2) activity limitation and (3) participation restrictions.	Note that formal, technical and nominalised <sup>1</sup> language are used throughout this response. Some illustrative examples are boxed for you on this page.
Exemplification	John now has altered heart and cognitive function impairing his physical, intellectual and emotional capacity. This creates activity limitations for John as he is no longer able to perform to his pre-impaired state. In turn, John is now less likely to participate in a range of social, work and domestic tasks. The combination of these three factors illustrates how John has become disabled by his chronic illness and impairment.	

<sup>1</sup> Nominalisation is when a process or description is presented as a thing (in other words, when something usually expressed as a verb or an adjective is expressed as a noun – e.g. talking about someone's *participation* instead of the verb *participate*). It is important in academic writing.

**Figure 5.1** Annotated exemplar sample

### ***Ethical considerations***

Approval for the conduct of the study was gained from the Human Research Ethics Committee at Western Sydney University University (Approval No. H10803) and the University of Wollongong and the SESLHD Local Health District (Approval No. NSA15/14). All participants provided informed consent and all data were de-identified in reporting. Pseudonyms are used to protect participants' identities.

### Participant recruitment

At the commencement of the semester, students who were enrolled in this unit were contacted via their student email to inform them about the study. Attached to this email was a participant information sheet and a link to the 'opt out' email address, should they have wished that their administrative data not be used, that they not be contacted for interview, or to opt-out of the study altogether. They were advised that their participation was voluntary, and they could withdraw at any time without penalty.

A student list was developed of potential participants to be interviewed based on the administrative data. Potential participants were stratified and grouped into six categories according to their hit rate (dichotomised at the median of 6.9 hours) on the online LMS site and their cumulative GPA, clustered into three groups (low: <3.5; moderate: 3.5 to 5.4; and high: >5.4) (Figure 5.2).

Two students from each category (Figure 5.2) were contacted by the first author, initially via email, followed by a phone call, to participate in an interview about their experiences of using the AE. During this invitation, the researcher declared having no involvement in marking the essay of this unit. They were then asked to provide written consent, before arranging for a suitable time for an interview. No student declined participation. A summary of the scope of the study and the interview process were provided before each interview. Participants were informed that any information provided will be managed confidentially.

- |    |  |
|----|--|
| 1. | High hit rate (>6.9 hrs) and high GPA (>5.4)         |
| 2. | High hit rate (>6.9 hrs) and moderate GPA (3.5-5.4)  |
| 3. | High hit rate (>6.9 hrs) and low GPA (<3.5)          |
| 4. | Low hit rate (<2.5 hrs) and high GPA (>5.4)          |
| 5. | Low hit rate (<2.5 hrs) and moderate GPA (3.5 – 5.4) |
| 6. | Low hit rate (<2.5 hrs) and low GPA (<3.5)           |

**Figure 5.2** Student stratification for interviews

***Data collection***

All interviews were undertaken after the students had submitted their essays and before the marks and feedback were returned. This timing aimed to minimise bias as students may be influenced by the mark they received for the assessment task. These interviews were conducted face-to-face or by telephone depending on the participant preferences and geographical location. One face-to-face interview occurred on-campus, while 11 telephone interviews were undertaken. No third party individuals were present while the interviews were conducted. After 12 interviews it was felt that data saturation had been achieved and no further participants were recruited.

The interviews were undertaken by the first author who had completed training in conducting interviews. The interview guide was pilot tested in the previous year with students to ascertain that pertinent data related to the AE intervention was captured. The audio recordings and transcripts of these pilot interviews were reviewed, and the interview schedule was refined.

All interviews were digitally recorded and transcribed using a professional transcription service. Participants were interviewed once, ranging from 27 to 60 minutes. During and following each interview, field notes were taken to document the researcher's perceptions. Transcripts were not returned to participants for checking due to time and resource constraints.

***Data analysis***

Each interview transcript was initially checked by the first author against the audio recordings to ensure accuracy. Three authors (Rebekah Carter, Lucie Ramjan and Yenna Salamonson) independently read and re-read all transcripts, before data analyses were independently conducted using the six steps of thematic analysis as described by Braun and Clarke (2006). After familiarising themselves with the data, the authors compared and discussed codes, themes and sub-themes that were generated independently. Themes and sub-themes were renamed and reclassified through a consensus process. All authors were consulted to review these themes and sub-themes to ensure agreement with the interpretation of data.

## Results

Of the 12 participants, eight participants used the AE (Kate, Amy, Hannah, Paige, Brendan, Will, Lauren and Angus), and four participants (Charlotte, Emma, Tess and Scarlett) did not, identifying various reasons for not doing so (Table 5.1). Thematic analysis identified four overarching themes with subthemes, representing participants' experiences of using the AE (Table 5.2). Words added to participant quotes in brackets [ ] are added to aid clarity of understanding to the reader.

**Table 5.1** Participant demographics

Pseudonym	Previous educational experience	Stratification (Hit rate-GPA)	AE use	Essay grade
Kate	Enrolled in 'English' degree in UK 16 years ago	High-High	Yes	Distinction
Amy	Completed advanced diploma in Business Management and 1 year of a teaching degree	High-High	Yes	Distinction
Charlotte	Working part-time in administration; previous training on essay writing for mature students	High-Mod	No	Pass
Hannah	International student, previous academic literacy training taught essay writing	High-Mod	Yes	Pass
Paige	International student, RN in Fiji 13 years,	High-Low	Yes	Pass
Emma	Completed only vocational education, working as an Assistant in Nursing	High-Low	No	Fail
Brendan	Enrolled nurse for 30 years, involved in policy writing & education, has vocational education qualification	Low-High	Yes	Distinction
Will	RN in Nepal, worked in ICU 2 years, working now as AIN, completed vocational education course in Australia	Low-High	Yes	Distinction
Lauren	Enrolled in the Bachelor of Arts for 1 year	Low-Mod	Yes	Credit
Tess	Enrolled nurse for 28 years, repeating the unit	Low-Mod	No	Fail
Scarlett	Enrolled in the Bachelor of Teaching for 2 years	Low-Low	No	Pass
Angus	Enrolled in the BN straight from high school	Low-Low	Yes	Fail

**Table 5.2** Themes and subthemes

Theme	Subtheme
1 'AE as a blueprint to draft the building plan'	1.1 'Drafting with the blueprint' – provide clarity of expectations 1.2 'Staying within the path' 1.3 'The blueprint has the final say'
2 'AE as a scaffold to build structure'	2.1 'Structure for choice of terminology, and depth of content' 2.2 'Structure for linking concepts and ideas and supporting with evidence'
3 'AE as the template to check and keep on track'	3.1 'Checking as I'm writing' 3.2 'Stop me from getting off track, or stuck' 3.3 'Highlights and notations – lighting the track'
4 'Built AE... but they didn't come'	4.1 'I can do this myself, I have access to other resources' 4.2 'I had no time... I forgot' 4.3: 'Not useful...I did not want to plagiarise'

### **'AE as a blueprint to draft the building plan'**

Of the eight participants who used the AE, seven described being unsure of the assessment requirements and used the AE as a tool to provide clarity. The AE became a blueprint for them as they drafted their essays.

#### **'Drafting with the blueprint' – provide clarity of expectations**

While participants acknowledged that they were supplied with instructions, standards and criteria, the AE provided the blueprint that participants could use as a reference point as they planned the essay structure. These participants used the AE as a framework to identify the essentials needed to construct their essay.

*...it's better to have [an] exemplar...to have an idea of what I have to write, rather than just beating around in the dark and say okay, 'this is what I do....' (Paige – High hits, low GPA, essay grade - pass).*

The AE was used by Kate, Brendan, Will and Lauren to provide clarity of the requirements, with more than half of the eight participants reporting they had difficulties starting the essay. The clarity occurred through studying the format and layout of the AE when preparing to write the assessment task.

*... just because it's [AE] a very clear format on how to write an essay (Kate – High hits, high GPA, essay grade – distinction).*

*... I think the AE really helped me with how to start it and what I should be doing (Lauren – Low hits, mod. GPA, essay grade - credit).*

Further, others used the AE as a tool to understand the question and clarify ideas on what to write in the essay.

*...after reading it, understanding, and then I make little points from my exemplar to understand my question, that okay, this is what my question is asking me to do, so this is what I have to write. At first it was a bit difficult for me to understand [with] the exemplar, but later on, as I said, I went on reading twice and thrice. That's when I was like okay, so this is what it means. This is the exemplar and there's my question, so this is what my question is asking me to do, so this is how I can set it out (Paige – High hits, low GPA, essay grade - pass).*

### ***'Staying within the path'***

When commencing drafting their essays, Amy, Brendan, Will and Angus commented on being unsure as to what and how much information to include, and where and how to cite in-text references. However, they reported that the AE provided the direction and guidance they needed.

*...exemplar really guided you into how much detail they wanted you to go into and although it was absolutely a totally different topic, you kind of understood it (Amy – High hits, high GPA, essay grade – distinction).*

*So it was good when I read it I could see how they were always linking back to the fact that yes it's about his [case study] heart. But he also has a different problem that's going to impact on how you're going to treat him. So I think that helped me to remember to link back why I was doing the things the way I was doing them (Brendan – Low hits, high GPA, essay grade – distinction).*

*... okay, we write the definition of this and then we write a few more sentences and then we use the references ...' (Will – Low hits, high GPA, essay grade – distinction)*



*...so this provided a direction on which way to go and what to put in, in certain structures of the essay (Angus – Low hits, low GPA, essay grade - fail).*

### **‘The blueprint has the final say’**

All participants reported that they received a range of instructions, from peers or tutors, that were not always consistent. Given the large cohort of students enrolled in this unit across multiple campuses and with multiple tutors, this was not unexpected. Concerning inconsistencies in instructions and advice, Paige, Amy and Lauren relied on the AE to provide the specific guidance needed to write the essay.

*...I think my tutor was explaining something else and I was understanding something else (Paige – High hits, low GPA, essay grade - pass).*

*... So it was this feeling of, ‘uh oh, holy crap, who am I going to go to now?’ But that exemplar really guided you into how much detail they wanted you to go into and although it was absolutely a totally different topic, you kind of understood it. It was like breaking it down into a, let’s talk about stats, let’s talk about definitions, and then go into this and then going to interventions and blah, blah, blah.... (Amy – High hits, high GPA, essay grade –distinction).*

*.....I kept referring back to how they structured the essay and I tried to make my essay the same as that - similar to that (Lauren – Low hits, mod. GPA, essay grade - credit).*

### **‘AE as a scaffold to build structure’**

Although participants who used the AE found this resource to be helpful, how this tool was used varied among the participants.

### **‘Structure for choice of terminology, and depth of content’**

For some, the AE was used to provide an outline or framework for the type of terminology to use, and depth of content to include.

*It [the AE] just sounded so intelligent and easy to read. So I think it just helped me realise that I need to be more to the point, more succinct in how I explain things. Some of my language is sometimes too flowy and flowery. When I read theirs, they were just to the point (Brendan – Low hits, high GPA, essay grade – distinction).*

*...so it was just helpful - when you just look at the example, you just know okay, I just need to follow this and then I'll make my own - write my own essay using the same style (Will – Low hits, high GPA, essay grade – distinction).*

*So this provided a direction on which way to go and what to put in, in certain structures of the essay (Angus – Low hits, low GPA, essay grade - fail).*

*it was a good way to, yeah guide me into - any questions I had, I kept referring back to that and going 'oh look they didn't go into that much detail about this, that's what I'll do' (Amy – High hits, high GPA, essay grade – distinction).*

***'Structure for linking concepts and ideas and supporting with evidence'***

All participants who used the AE found it to be an excellent tool for showing students how to structure their paragraphs. The AE was beneficial for learning how to link concepts and ideas well from one paragraph to the next.

*...made a big difference in understanding how to start the next paragraph. How to get into talking about the next thing rather than just waffling on and talking your way into it. Linking, how you link things together (Brendan – Low hits, high GPA, essay grade – distinction).*

*... I think without that I would have been a little lost in how to start writing it. I wouldn't know where to put the information or how to structure the paragraphs so that was - the information flowed throughout and it made more sense (Lauren – Low hits, mod. GPA, essay grade - credit).*

In addition, the AE provided a concrete example showing how to support their information with in-text references, using peer-reviewed literature. Four participants described learning how to set out their work in a coherent, logical and succinct manner as a consequence of using the AE.

*...how to structure it so that it refers back to the question, includes references (Lauren – Low hits, mod. GPA, essay grade - credit).*

*... The content ..... was good because I was being told to do, the content that the exemplar had was, again, a guide. It's what - all you have to have in your essay. The references, the way that it said in the remarks that 'okay, this is what you have to do, you don't have to do that', that was, again, a guide as well, what you can include, what you don't have to include... (Paige – High hits, low GPA, essay grade - pass).*

#### **'AE as the template to check and keep on track'**

Participants highlighted how the AE "kept me on track". This checking process allowed participants to compare their essay to the sample exemplar. For some this was an iterative process from the time they started writing, then, used it to compare each section at a time.

#### **'Checking as I'm writing'**

These participants would write a section, then check against the exemplar to see whether their essay was structured similarly; the AE became a 'reference point'.

*It was good to use it as a reference point for me (Kate – High hits, high GPA, essay grade – distinction).*

*... first of all I open the annotated example and then see how the introduction example has been structured. Then I think about mine and then I write my introduction and then will go back to that example and see if my introduction structure is almost the same as exemplar was. Not the same, but it makes sense as the exemplar. I used to just have a look on each and every paragraph of an essay and then would go*

*back to my assignment and do it and then would just refer it back to it.*  
(Hannah – High hits, mod. GPA, essay grade - pass).

*How to set it out in a way that makes it more readable, definitely. That's the first thing my partner said [who was proof reading essay prior to submission]. This is the first one that he hasn't said 'oh you're talking about that there, and then you're talking about that there and not introducing new evidence in the conclusion'... so referring back to it was good in that if I thought I'd got it right but I wasn't quite sure. I could look at it and say 'yes, look, I've done it similar to them'. (Brendan – Low hits, high GPA, essay grade – distinction).*

***'Stop me from getting off track, or stuck'***

Paige and Brendan used the AE to determine what information needed to be included in the AE. This helped to keep them on track.

*....going back to the exemplar, I was like 'okay, this is not what you have to include' (Paige – High hits, low GPA, essay grade - pass).*

*...referring back to it was good in that if I thought I'd got it right but I wasn't quite sure ... having something to compare it to really helped me (Brendan – Low hits, high GPA, essay grade – distinction).*

Unlike Hannah, who checked sections at a time, Will completed the whole essay and then compared his essay to the exemplar afterwards, checking that his essay adhered to the structure of the exemplar.

*...check how they have organised their introduction, how long their sentences were, how they have written if - if they have used certain terms, and how they have linked it - how they have linked the bodies together (Will – Low hits, high GPA, essay grade – distinction).*

Others used the AE to check they were on track in areas they experienced difficulties as a troubleshooting strategy. These areas mainly involved adhering to the word limit and understanding complex concepts.

*...if I was stuck and I felt like I wasn't sticking to the word count I would refer back to it and I'd be like - I'll roughly give it as much word count*

*as they kind of have* (Amy – High hits, high GPA, essay grade – distinction).

*... if I was writing my essay and I was a bit stuck or I thought that my questions were just having this flight of ideas about the questions, so that's when I would go back to the exemplar and say 'okay, the exemplar says 'blah, blah, blah', then this is how it goes ...'* (Paige – High hits, low GPA, essay grade - pass).

### ***'Highlighting the track'***

Finally, Brendan and Angus both found the highlighted text and annotations within the AE particularly helpful to their learning and kept them on track. The highlighting format (see Figure 1) used in the AE distinguished the different components of a paragraph. The annotations alongside the exemplar provided further explanation of the significance of the highlighted sections. In fact, Brendan found the AE so useful that he has made the resource available to his daughter who is in high school: *'I even printed it out and gave it to my daughter who was sitting her Year 11 exams'*.

*The little notes on the side of it explaining why you put that there and why you put something else there* (Brendan – Low hits, high GPA, essay grade – distinction).

*...had highlighted it and then they had notes on the other sides too and explained what to do* (Angus – Low hits, low GPA, essay grade - fail).

### ***'Built AE... but they didn't come'***

Four participants (Charlotte, Emma, Tess and Scarlet) did not use the AE, listing a range of reasons. These included: i) a belief that the AE was not needed, opting for alternate resources; ii) running out of time or a lack of engagement; and iii) a belief that AE was not useful or a misperception that the AE would put them at risk of plagiarism.

***'I can do this myself, I have access to other resources'***

Charlotte, for instance, opted not to use the AE as she was confident she had the essential skills to write a good essay. She had undertaken previous short courses on essay writing and was working in administration.

*.... I took part in a course that was offered by the university, an introduction on essay writing ..... I really think it was aimed at mature age students who hadn't been involved in study for either some time or not at all. (Charlotte – High hits, mod. GPA, essay grade – pass).*

Charlotte, Emma and Tess explained that they did not use the AE because they had access to other resources to help them write their essays. In the case of Charlotte, she attended face-to-face academic literacy workshops tailored to support the writing of that specific essay, while Emma opted to use her nursing dictionary, online textbooks and 'Google Scholar'.

*.... I've got a nursing dictionary, and even though that's over 10 years old, I still use that. Anything else, yeah I get most of it from Google Scholar. (Emma – High hits, low GPA, essay grade – fail).*

Likewise, Tess relied on online resources and face-to-face discussions with tutors during tutorials and online video clips.

*.... Class tutor explained pitfalls from the previous year and how to avoid them, and ..... Khan academy resources [videos] on YouTube (Tess – Low hits, mod. GPA, essay grade – fail).*

***'I had no time... I forgot'***

During the interviews, both Charlotte and Tess also admitted that they did not use the AE because they were time-poor. The essay was due early in the semester, which made it *"due during clinical placement..."* (Charlotte – High hits, mod. GPA, essay grade – pass).

Compounding this time constraint was that both were also engaged in paid employment. Charlotte was enrolled as a full-time student, had two dependents and worked part-time whilst Tess combined a full-time study load with full-time paid employment.

*.... trying to mix study and full-time work ..... (Tess – Low hits, mod. GPA, essay grade – fail).*

Emma, on the other hand, purported to have sighted the AE on the learning management site but forgot to use it when writing her essay while Scarlett did not look at the AE on the site at all.

*.... I only just read through it, to be honest, I forgot about using that... (Emma – High hits, low GPA, essay grade – fail).*

*.... I didn't click on and I'm not on [the LMS] that much. I'm not a student that checks that much. It's probably a bad thing, but yeah. I'm not always clicking in announcements. It's stupid though because some of them are pretty important. (Scarlett – Low hits, low GPA, essay grade – pass).*

***'Not useful...I did not want to plagiarise'***

Another reason given for not using the AE was the misconception that it would not be useful. This was the experience of Tess as she used the AE previously, but perceived using this tool did not improve her grade.

*.... because I used it last time and it didn't go so well. So I .... steer clear of the – yeah [AE] (Tess – Low hits, mod. GPA, essay grade – fail).*

Although the AE was recognised by most as a useful tool, one reason given for not using the AE was the concern about the risk of plagiarism.

*.... It was kind of a catch-22 for me - I had the feeling that it was a good resource, ... when I was reading the discussion board people said that [there] is an exemplar and you shouldn't be using that too much. So, I didn't want to get into the trap of defaulting back to that. I wanted to make mine unique to me. (Charlotte – High hits, mod. GPA, essay grade – pass).*

**Discussion**

This study revealed, for the most part, the usefulness of the AE as a tool to support students with essay writing, contextualised to the assessment task. The study also revealed a high level of student engagement with the AE, with eight of the participants interviewed reporting to have used the tool. Beyond using the AE as a schema or a blueprint, some participants also used it as a step-by-step and paragraph-by-paragraph guide, as they were drafting their essays. Additionally, some participants reported using AE upon completion of their draft to check and ensure that they were on the right track, and nothing was missed. While students' perceptions of AE usage have previously been reported to be a useful and helpful resource (Handley & Williams, 2011; Wimshurst & Manning, 2012), findings of this approach of undergraduate nursing students using the AE is new, and yet to be reported.

Notwithstanding this, AEs that explicitly provided meta-language support, including sentence and paragraph structuring, have been used in primary and secondary schools. These exemplars usually incorporate colour-coding and highlighting, accompanied by text explanation (Parkin & Harper, 2018). In higher education, academic support tools have focused on student development of evaluative knowledge (Dixon et al., 2020), and not specifically focussing on the structure and linguistic characteristics. This is likely because of an expectation that students in higher education would have achieved competency in fundamental literacy skills (Matruglio, 2019). The need to instruct students on how to write an introduction, body and conclusion of an essay, or how to structure paragraphs and the type of language to use, supported with references may be deemed redundant, as there is the assumption that students in the second year of their nursing program should be able to complete this task independently. However, the findings of this study found the opposite to be true.

With widening participation and the multiple entry pathways into nursing programs, some of these nursing students may not have the assumed levels of academic literacy skills, which could be a contributing factor for higher attrition rates and underperformance among this student cohort (Northall et al., 2016). Compounding this issue is the increasing number of students from cultural and



linguistically diverse backgrounds who were more likely to require support with academic literacy and language skills (Glew et al., 2019). Hence, it is not surprising that these students reported the usefulness of this AE that also provided students with meta-language support.

Despite the high uptake of the AE, some participants chose not to use the AE for a range of reasons. Of concern was the misconception that using the AE may put them at risk of plagiarism. This finding is not unique to this study. Both Beaumont et al. (2011) and Newlyn and Spencer (2010) also reported students' avoidance of using exemplars because of concerns that they may inadvertently plagiarise. This misconception related to AE usage is not restricted to students. In their study of academic staff, Hendry et al. (2012) found that staff also expressed their concerns that exemplars would encourage students to plagiarise. Collectively, these findings underscore the importance of providing detailed explanations to both students and staff on the role of AEs, as well as how to use them effectively, and embedding the use of AEs into teaching materials and classroom activities (To & Carless, 2015; To & Liu, 2018).

### ***Limitations***

This study only examined the students' perceptions of AE usage within one unit of study in a nursing program in a single institution. Nevertheless, the sampling procedure deliberately stratified participants with different levels of academic engagement and performance to obtain a more representative study sample. The brevity of each interview may possibly have impacted data richness. Upon reflection, repeat interviews may have ameliorated this issue. However, the researchers intended that all interviews were undertaken over a short interval, after the submission of the assessment item but before the release of results to ensure information collected was not influenced by grades awarded for the essay.

### **Conclusion and relevance to clinical practice**

This study provided insight into students' experiences of using the AE, or conversely reasons for not using this support tool. The approach as to how some used the AE as a schema or blueprint has yet to be reported among students in higher education. However, widening participation and student diversity has impacted upon the needs of students. Uptake and the ways the students used

the AE indicated that they needed that degree of support. The high uptake indicated that overall, students embraced the resource as it was tailored to their needs by providing a concrete example for them to follow as they are drafting the assessment task.

Among those who did not use the AE, misconceptions of how to use the AE effectively were contributing factors. Hence, it is essential to instruct both students and teaching staff on how to use AEs as a tool to support academic writing and avoid the risk of inadvertent plagiarism.

# **Chapter 6:**

# **Discussion and Conclusion**

## Introduction

The **FASTEN** Project aimed to explore the utility and effectiveness of AEs and investigated the experiences of using this academic support resource in a cohort of undergraduate nursing students. This chapter discusses each of the study objectives and summarises new knowledge that has been generated. Implications of findings and recommendations for future research are also discussed, followed by the limitations of the Project and conclusions.

## Review of the literature: Paper 1

*‘To examine the evidence regarding the effectiveness of exemplars as academic support in higher education’ (Carter et al., 2018).*

Exemplars are a valuable tool as they bridge the gap of understanding between student and marker requirements (Hendry & Anderson, 2013). Current methods of providing feedback are often suboptimal for several reasons, including students not engaging with the feedback, and not knowing how to apply the feedback to future assessment tasks (Price et al., 2010). Reasons for ineffective use of assessment feedback may be a lack of detail in the feedback, or not understanding the feedback provided (Nicol, 2010). The use of exemplars enables students to critically examine the assessment requirement and possible pitfalls before attempting to complete the assessment item (To & Carless, 2015), as exemplars provide concrete, contextual, de-personalised information in a non-threatening fashion (Newlyn, 2013).

Findings of the integrative review included in this thesis (Carter et al., 2018) showed that exemplars are an important tool for clarifying expected standards (Hendry & Anderson, 2013; Hendry et al., 2011; Hendry & Jukic, 2014; Wimshurst & Manning, 2012). Although exemplars can be presented in various formats, two common approaches reported in the literature are the use of past students' work or purpose-built examples to address specific expectations and requirements of the assessment task (Carless & Chan, 2017; Dixon et al., 2020). However, these exemplars may or may not have been annotated with feedback. The integrative review identified examples wherein students were required to appraise past student papers, grade the work, and provide justification for the awarded grade/mark (Bell et al., 2013; Handley & Williams, 2011; Hendry & Anderson, 2013; Hendry et al., 2012; Hendry & Jukic, 2014; Hendry et al., 2016; Newlyn &

Spencer, 2010; Scoles et al., 2012; Wimshurst & Manning, 2012; Xu, 2019). Most of the studies included in the integrative review used the exemplars as the basis for peer evaluation and peer review activities. These activities were seen to lead to increased engagement with the task.

Since the publication of this integrative review (Carter et al., 2018), it has been cited sixteen times. Of these, six citations used the review to provide evidence to support the use of exemplars in higher education (Bacchus et al., 2020; Grainger et al., 2018; Hood, 2019; Huang et al., 2020; McConlogue, 2020; Sambell & Graham, 2020). Within these six citations, two used the paper to support their assertion that students valued and used exemplars (Bacchus et al., 2020; Hood, 2018), two cited the paper to indicate different ways students used exemplars (McConlogue, 2020; Sambell & Graham, 2020), one used the paper to support the use of exemplars as a resource for students to become independent learners (Grainger et al., 2018) and one used the paper to highlight that exemplars could be used in nursing practice such as during communication or when undertaking clinical skills (Huang et al., 2020).

An updated search of the literature since the publication of this integrative review yielded only one additional study that met the inclusion criteria of the review on AEs (Xu, 2019). This experimental study by Xu (2019) developed a rubric based on pre-determined criteria, for students to undertake self-assessment, after finishing a complete draft of their written essay. In the experimental group, students were also provided with selected sample essays submitted by past students, which were annotated with justification to show how content experts arrived at a given score. In contrast to previous studies that used AEs (Bell et al., 2013; Carter et al., 2018; Handley & Williams, 2011; Hendry & Anderson, 2013; Hendry et al., 2012; Hendry & Jukic, 2014; Hendry et al., 2016; Newlyn & Spencer, 2010; Scoles et al., 2012; Wimshurst & Manning, 2012; Yucel et al., 2014), Xu (2019) was the only study that included self-assessment as a learning strategy. To date, no research explores the use of purpose-built AEs such as that used in the FASTEN project.

**Quantitative phase: Paper 2**

*'To evaluate the effectiveness of AEs in a large, multi-campus cohort by examining the relationship between engagement with an AE and student's socio-demographic profile, examining the influence of AE use and academic performance' (Carter et al., 2019).*

This objective was examined in the quantitative phase of this study and presented as a publication in Chapter Four (Carter et al., 2019). The findings of Paper 2 highlighted that despite the hypothesis that there would be a demonstrated improvement in essay grade for those who used the AE, the data did not support this. Nevertheless, the four distinct student characteristics (older students, females, overseas-born, and high LMS hits) of students who did use the AE may indicate that use of this learning support strategy met the needs of those who were more motivated and who were less confident with the assessment task.

Two additional points that would need consideration and are discussed below include: a) dose-effect or intensity of the intervention implemented in the FASTEN project; and b) strategies to engage other student groups who need academic support. Similar to the FASTEN project, the study by Snowball (2014) about interactive content and online activities to accommodate diversity also used non-interactive web-based academic resources to provide student support by scaffolding learning. Snowball (2014) reported that this mode of support did not improve academic performance. It is plausible that due to the different learning preferences of students that have been previously reported (McFarlane, 2010), a non-interactive academic resource that requires careful reading may not appeal to some students. Therefore, it is unreasonable to expect that a non-interactive learning resource would meet the needs of all students.

To improve engagement with the AE and academic performance across a diverse student group, it is likely that a multi-faceted approach is required. One such strategy could be interactive workshops. This approach has been reported by Sogunro (2015) as an effective pedagogical approach for adults in higher education. Collaborative learning, through using small group activities or workshops facilitated by academic staff that enabled students to share knowledge and expertise, has been reported to be effective in promoting engagement (Scager et al., 2016).

Increasingly, students who enrol in higher education are technologically savvy and do expect learning activities to be engaging (Lister, 2015). Hence, there is an increased expectation that academics develop a range of web-based support strategies that enhance student learning (Guardia et al., 2019). Effective strategies currently in use include active online resources, such as quizzes and games to promote student learning (Snowball, 2014). These innovative approaches, such as gamification and game-based learning, in higher education have been shown to improve student attitude, engagement, and performance (Buckley & Doyle, 2016; Subhash & Cudney, 2018; Yildirim, 2017). Nevertheless, there continue to be studies that report an improvement in engagement however no improvement in performance (final exam scores) (Leaning, 2015; Stansbury & Earnest, 2017) or do not examine the effects on performance. For example, Ivala and Gachago (2012) reported that the use of informal social media platforms, such as Facebook and blogs, promoted student engagement, however, this study did not examine their effects on academic performance.

Although some of the individualised innovative learning resources have been found to improve engagement and at times academic performance, these are generally labour and resource-intensive or may be only suitable for small group learning. The advantage of the AE is that although the development of the resource may be time-consuming, it can be used by all students who are required to undertake that assessment activity. Encouragingly, findings from the FASTEN project showed that students who were motivated, indicated by the LMS hit frequencies, and who were more likely to underperform were more likely to use this academic support resource.

### **Qualitative phase: Paper 3**

*‘To explore students’ experiences of using the AE, specifically identifying the benefits and barriers of using the AE’ (Carter et al., 2021).*

Study findings that addressed this objective of the FASTEN Project, published in Paper 3 Carter et al. (2021) reported the experiences of students who were both users and non-users of the AE. Specifically, the Discussion section of Paper 3 addressed the meta-language support that the AE provided, and the misconceptions some participants had regarding using the AE. Secondary factors

that may have contributed to a lack of student engagement with the AE that were not discussed in Paper 3 will be addressed here. They are: i) lack of clarity about academic writing; ii) challenges for students with academic writing; and iii) other barriers to student engagement with learning support strategies.

### ***Lack of clarity about academic writing***

Students who did not engage with the AE may have been unclear as to how this resource could assist them with academic writing. In this era of widening participation and the multiple entry pathways into nursing programs in higher education, non-school leavers can gain admission to university without demonstrating academic literacy skills. Nevertheless, academic writing skills are essential for success in higher education. Students who experience difficulties in academic writing are more likely to underachieve or leave the program ahead of completion (Itua et al., 2014; Northall et al., 2016). In contrast, students who are skilled in presenting pertinent information or ideas through their writing are more likely to experience academic success (Itua et al., 2014). To unravel the complexity in academic writing for students who are yet to fully comprehend this concept, the purpose-built AE with meta-language support developed in the FASTEN project aimed to provide clarity of the requirements of academic writing. Participants who used the AE reported that this tool clarified how they should structure their work by providing a blueprint on which to draft or scaffold their essays. Other participants who were non-AE users, reported confusion with assessment requirements and what type of information to include as they received inconsistent information from multiple sources. Hence, in addition to providing AE with meta-language support, it would be worthwhile to emphasise how this mode of academic support would be beneficial in providing clarity to their academic writing process.

### ***Challenges for students with academic writing***

Those who did not engage with the AE also reported challenges with academic writing. However, it is common for students in higher education to report experiencing a range of challenges with academic writing (Noori, 2020). Contributing to these challenges are competing interests, such as family and lifestyle responsibilities, which may impact the way students participate in their education (McLean, 2018). Yevelson-Shorsher and Bronstein (2018) suggest



that since the advent of the Internet, students lacked the essential information literacy skills. At the same time, students have become more dependent on the information readily sourced online for their research needs, which enabled them to spend less time completing assessment tasks (Itua et al., 2014).

In the FASTEN project, several participants who did not use the AE, purported to have access to other Internet resources, and hence, did not perceive they required assistance. Nevertheless, these resources may be at best variable in quality, and of concern, some of these short courses on essay writing are of questionable academic standard. Of the interview participants, the three participants who did not use the AE relied upon readily available textbooks online, other online resources, discussions with their tutor and Google Scholar. Likely, most of these participants had yet to develop the skills to synthesise information from various online resources retrieved from their online search engines, making it difficult to integrate this information into their essay writing. Furthermore, it is recognised that even among students who were able to search academic, peer-reviewed databases, some had difficulty evaluating the quality of the retrieved resources (Bronstein, 2011). Compounding this problem is the time students needed to spend, understand and synthesise information sourced from their searches to write their essay (Itua et al., 2014). Students who allocated insufficient time to understand and paraphrase content, as well as having poor academic writing skills, were contributing factors to the increase in plagiarism through copying and pasting from Internet resources, or contract cheating, that is, outsourcing their assessment work to third parties (Lindahl & Grace, 2018). Hence, by providing academic resources, comparable to the AE, engaging and supporting students early in their essay writing process, may ameliorate the risk of students engaging in behaviours that breach academic integrity.

### ***Other barriers to engagement with learning support strategies***

Beyond a lack of clarity about academic writing and challenges with academic writing, several other barriers may have impacted student engagement with the AE. During the qualitative interviews reported in Paper 3, some participants who did not use the AE believed they did not need such a resource as they had access to other resources. Others just ran out of time or forgot the tool was available for use. Further, some perceived generic support as irrelevant (Chanock et al.,

2012). This trend of non-participation among students who are time poor has previously been reported, as these students would not prioritise additional modules or services that do not award academic credit (Bailey, 2018). Additionally, many academic support interventions are perceived by students as remedial (McWilliams & Allan, 2014), and those students who believe their academic writing skills are of a reasonable standard avoid using these support strategies for fear of being stigmatised (Bailey, 2018).

Academic staff engagement with learning support strategies is an essential component to facilitate student success. Lack of engagement by academic staff has been identified as an additional barrier to a student's engagement with learning support strategies (McLean, 2018). Academic engagement with the AE was supported by the availability of the resource uploaded to the online learning platform, announcements sent to students advising of this resource and a tutor facilitated discussion introducing the AE to students. Of significance, there were no other activities or explanations provided to students about how to use this support strategy to scaffold student learning. Whilst the AE was promoted as a resource for students to assist with academic writing, lack of engagement with this tool by academic staff may have adversely impacted on students' uptake of the AE because this resource was uploaded with little further interaction and thus did not promote the importance to students. Consequently, the AE became a low priority for students who considered it less relevant than other resources (Wingate, 2012). Therefore, scaffolding the use of the AE and embedding strategies that promote engagement by both academic staff and students, may increase the overall uptake of the resource and improve students' essay writing skills.

### **Strengths and limitations**

A review of the literature has identified that there is little evidence of undergraduate nursing students' use of exemplars to support their academic writing and there are few, if any studies, to have specifically explored the use of a purpose-built AE. The findings of this study have provided valuable insight into the factors that impact student engagement with academic support resources in addition to a students need and use of meta-language support. This is the also the first time that the experience of nursing student engagement with this type of

approach, including meta-language support, has been explored. Another key strength of the FASTEN study was the high engagement rate. With no students withdrawing from the Project all enrolled students participated. This provided both a large cohort and reduced selection bias as all students were included.

This study, however, also has some limitations. Firstly, 401014 Health Variations 2 is a single subject at one university, thus the findings may not be directly generalisable to all other institutions. Nevertheless, the study had a mix of traditional and non-traditional participants from a diverse population in terms of socioeconomic status and ethnicity and hence there is likely to be a legitimate degree of generalisability. Secondly, the AE was a standalone, static resource uploaded for student use on the LMS. Teaching staff and students were advised of its availability but would have benefited from a detailed explanation about how to use the resource effectively. Thirdly, the study results were a 'snap-shot' in time, that is, just one episode in one year and there was not an opportunity to follow up or for comparison. Therefore, extraneous factors may have impacted the outcomes. Lastly, this study used a prospective cohort design where the students' quantitative data and qualitative data were collected before the release of results for the assessment task. Whilst this minimised bias associated with knowledge of outcomes, it also precluded consideration of assessment outcomes in responses.

### **Recommendations for nursing education**

For the AE to be an effective resource it needs to be engaging, assist in improving academic outcomes and be sustainable. The challenge now is to find a way to support students and meet these requirements. A bottom-up approach, usually an embedded intervention rather than a remedial 'one size fits all' approach is recommended (Hill et al., 2010). More autonomous and supportive learning environments are associated with greater engagement, better performance and higher quality learning (Ryan & Deci, 2017). Therefore, the development of any support strategies should be in conjunction with both academic staff and students. This co-design not only encourages students to take ownership of their learning, but it also enables them to ensure their specific needs are met. It is recommended that strategies to assist in the development of a student's academic writing must incorporate explicit instruction to ensure clarity of

expectations, practice and assessment of these strategies into the curriculum of their degree (Chanock et al., 2012). Embedding academic support interventions within-subjects is a practical way of showing students the connection between the discourse variables of their subject and the requirements of the assessment task (McWilliams & Allan, 2014). Once embedded, all academics must be trained on how to provide effective feedback. Lastly, academic staff should progressively monitor student use, for example, weekly, to determine engagement and identify gaps. Further strategies such as discussion forums to correct any misconceptions about the tool should be implemented to target those not using the tool.

### **Conclusion**

This study has increased our understanding of the impact of AEs on students' academic writing. Study findings have revealed that despite the quantitative results showing there was no discernable benefit in terms of improved academic performance, the qualitative findings showed that those who used the AE found it to be beneficial. The AE promoted student engagement and most students expressed satisfaction with this academic support strategy. For the AE to be successful in the future it should be developed in consultation with both academic staff and students and should be embedded as a multi-faceted intervention. Further research needs to focus on building uptake of this tool across multiple units in a degree program.

## References

- Agius, N. M., & Wilkinson, A. (2014). Students' and teachers' views of written feedback at undergraduate level: A literature review. *Nurse Education Today*, 34(4), 552-559.
- Andrew, S., Halcomb, E. J., Jackson, D., Peters, K., & Salamonson, Y. (2010). Sessional teachers in a BN program: Bridging the divide or widening the gap? *Nurse Education Today*, 30(5), 453-457.
- Bacchus, R., Colvin, E., Knight, E. B., & Ritter, L. (2020). When rubrics aren't enough: Exploring exemplars and student rubric co-construction. *Journal of Curriculum and Pedagogy*, 17(1), 48-61.
- Bailey, R. (2018). Student writing and academic literacy development at university. *Journal of Learning and Student Experience*, 1, 7-7.
- Baker, D. J., & Zuvela, D. (2013). Feedforward strategies in the first-year experience of online and distributed learning environments. *Assessment & Evaluation in Higher Education*, 38(6), 687-697.
- Beaumont, C., O'Doherty, M., & Shannon, L. (2011). Reconceptualising assessment feedback: A key to improving student learning? *Studies in Higher Education*, 36(6), 671-687.
- Bell, A., Mladenovic, R., & Price, M. (2013). Students' perceptions of the usefulness of marking guides, grade descriptors and annotated exemplars. *Assessment & Evaluation in Higher Education*, 38(7), 769-788.
- Bird, F. L., & Yucel, R. (2013). Improving marking reliability of scientific writing with the developing understanding of assessment for learning programme. *Assessment & Evaluation in Higher Education*, 38(5), 536-553.
- Blackboard.com. (2018). Cumulative Update 1 for Blackboard Learn, 9.1 Q2 2018.
- Boud, D., & Falchikov, N. (2006). Aligning assessment with long-term learning. *Assessment & Evaluation in Higher Education*, 31(4), 399-413.

- Boud, D., & Molloy, E. (2013). Rethinking models of feedback for learning: the challenge of design. *Assessment & Evaluation in Higher Education*, 38(6), 698-712.
- Bradley, D. (2008). *Review of Australian higher education final report* <http://www.deewr.gov.au/highereducation/review/pages/reviewofaustralianhighereducationreport.aspx>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101.
- Bronstein, J. (2011). The role and work perceptions of academic reference librarians: A qualitative inquiry. *Portal: Libraries and the Academy*, 11(3), 791-811.
- Brown, S. (2004). Assessment for learning. *Learning and Teaching in Higher Education*, 1(1), 81-89.
- Bruno, I., & Santos, L. (2010). Written comments as a form of feedback. *Studies in Educational Evaluation*, 36(3), 111-120.
- Buckley, P., & Doyle, E. (2016). Gamification and student motivation. *Interactive Learning Environments*, 24(6), 1162-1175.
- Burke, D. (2009). Strategies for using feedback students bring to higher education. *Assessment & Evaluation in Higher Education*, 34(1), 41-50.
- Burke, D. (2011). Now I've got the feedback, what do I do with it? Strategies for students to get more out of tutor feedback. *Practice and Evidence of Scholarship of Teaching and Learning in Higher Education*, 6(1), 43-60.
- Buultjens, M., & Robinson, P. (2011). Enhancing aspects of the higher education student experience. *Journal of Higher Education Policy and Management*, 33(4), 337-346.
- Byrne, J., & Humble, A. (2007). An introduction to mixed method research. *Atlantic Research Centre for Family-Work Issues*, 1-4.

- Cachia, M., & Millward, L. (2011). The telephone medium and semi-structured interviews: a complementary fit. *Qualitative Research in Organizations and Management: An International Journal*, 6(3), 265-277.
- Carless, D. (2006). Differing perceptions in the feedback process. *Studies in Higher Education*, 31(2), 219-233.
- Carless, D., & Chan, K. K. H. (2017). Managing dialogic use of exemplars. *Assessment & Evaluation in Higher Education*, 42(6), 930-941.
- Carless, D., Salter, D., Yang, M., & Lam, J. (2011). Developing sustainable feedback practices. *Studies in Higher Education*, 36(4), 395-407.
- Carter, R., Halcomb, E., Ramjan, L. M., Wilson, N. J., Glew, P., & Salamonson, Y. (2019). Does the use of annotated exemplars by nursing students predict academic performance? A cohort study. *Nurse Education Today*, 80, 34-39.
- Carter, R., Ramjan, L., Halcomb, E., Wilson, N., Glew, P., & Salamonson, Y. (2021). "It keeps me on track": Undergraduate nursing students' experiences of using annotated exemplars – A qualitative study. . *Nurse Education Today*, Under review.
- Carter, R., Salamonson, Y., Ramjan, L. M., & Halcomb, E. (2018). Students use of exemplars to support academic writing in higher education: An integrative review. *Nurse Education Today*, 65, 87-93.
- CASP, U. (2006). *Critical Appraisal Skills Programme: CASP Checklist*. Retrieved 2020 from <https://casp-uk.net/casp-tools-checklists/>
- Cathcart, A., Greer, D., & Neale, L. (2013). Learner-focused evaluation cycles: facilitating learning using feedforward, concurrent and feedback evaluation. *Assessment & Evaluation in Higher Education*, 39, 790-802.
- Chanock, K., Horton, C., Reedman, M., & Stephenson, B. (2012). Collaborating to embed academic literacies and personal support in first year discipline subjects. *Journal of University Teaching and Learning Practice*, 9(3), 3.

- Chung, E., Turnbull, D., & Chur-Hansen, A. (2014). Who are non-traditional students? A systematic review of published definitions in research on mental health of tertiary students. *Educational Research and Reviews*, 9(22), 1224-1238.
- Conger, D., & Long, M. C. (2010). Why are men falling behind? Gender gaps in college performance and persistence. *The Annals of the American Academy of Political and Social Science*, 627(1), 184-214.
- Cox, M., Irby, D. M., & Epstein, R. M. (2007). Assessment in medical education. *New England Journal of Medicine*, 356(4), 387-396.
- Crawford, T., & Candlin, S. (2013). A literature review of the language needs of nursing students who have English as a second/other language and the effectiveness of English language support programmes. *Nurse Education in Practice*, 13(3), 181-185.
- Crimmins, G., Nash, G., Oprescu, F., Liebergreen, M., Turley, J., Bond, R., & Dayton, J. (2016). A written, reflective and dialogic strategy for assessment feedback that can enhance student/teacher relationships. *Assessment & Evaluation in Higher Education*, 41(1), 141-153.
- Crisp, B. R. (2007). Is it worth the effort? How feedback influences students' subsequent submission of assessable work. *Assessment & Evaluation in Higher Education*, 32(5), 571-581.
- Crisp, G. T. (2012). Integrative assessment: Reframing assessment practice for current and future learning. *Assessment & Evaluation in Higher Education*, 37(1), 33-43.
- Croft, N., Dalton, A., & Grant, M. (2010). Overcoming isolation in distance learning: Building a learning community through time and space. *Journal for Education in the Built Environment*, 5(1), 27-64.
- Davis, C., Greenaway, R., Moore, M., & Cooper, L. (2019). Online teaching in social work education: Understanding the challenges. *Australian Social Work*, 72(1), 34-46.



- Devlin, M., & Samarawickrema, G. (2010). The criteria of effective teaching in a changing higher education context. *Higher Education Research & Development, 29*(2), 111-124.
- Di Domenico, S. I., Quitasol, M. N., & Fournier, M. A. (2015). Ratings of conscientiousness from physical appearance predict undergraduate academic performance. *Journal of Nonverbal Behavior, 39*(4), 339-353.
- Dixon, H., Hawe, E., & Hamilton, R. (2020). The case for using exemplars to develop academic self-efficacy. *Assessment & Evaluation in Higher Education, 45*(3), 460-471.
- Doody, O., & Noonan, M. (2013). Preparing and conducting interviews to collect data. *Nurse Researcher, 20*(5), 28-32.
- Duncan, N. (2007). 'Feed-forward': Improving students' use of tutors' comments. *Assessment & Evaluation in Higher Education, 32*(3), 271-283.
- Espasa, A., & Meneses, J. (2010). Analysing feedback processes in an online teaching and learning environment: an exploratory study. *Higher Education, 59*(3), 277-292.
- Ferguson, P. (2011). Student perceptions of quality feedback in teacher education. *Assessment & Evaluation in Higher Education, 36*(1), 51-62.
- Fluckiger, J., Vigil, Y. T. y., Pasco, R., & Danielson, K. (2010). Formative feedback: Involving students as partners in assessment to enhance learning. *College Teaching, 58*(4), 136-140.
- Glew, P. J., Ramjan, L. M., Salas, M., Raper, K., Creed, H., & Salamonson, Y. (2019). Relationships between academic literacy support, student retention and academic performance. *Nurse Education in Practice, 39*, 61-66.
- Grainger, P., Adie, L., & Weir, K. (2016). Quality assurance of assessment and moderation discourses involving sessional staff. *Assessment & Evaluation in Higher Education, 41*(4), 548-559.

- Grainger, P. R., Heck, D., & Carey, M. D. (2018). Are assessment exemplars perceived to support self-regulated learning in teacher education? *Frontiers in Education*,
- Guardia, J. J., Del Olmo, J. L., Roa, I., & Berlanga, V. (2019). Innovation in the teaching-learning process: the case of Kahoot! *Horizon*, 27, 35-45.
- Halcomb, E. (2019). Mixed methods research: The issues beyond combining methods [Editorial]. *Journal of Advanced Nursing*, 75(3), 499-501.
- Handley, K., & Williams, L. (2011). From copying to learning: Using exemplars to engage students with assessment criteria and feedback. *Assessment & Evaluation in Higher Education*, 36(1), 95-108.
- Hendry, G. D., & Anderson, J. (2013). Helping students understand the standards of work expected in an essay: Using exemplars in mathematics pre-service education classes. *Assessment & Evaluation in Higher Education*, 38(6), 754-768.
- Hendry, G. D., Armstrong, S., & Bromberger, N. (2012). Implementing standards-based assessment effectively: Incorporating discussion of exemplars into classroom teaching. *Assessment & Evaluation in Higher Education*, 37(2), 149-161.
- Hendry, G. D., Bromberger, N., & Armstrong, S. (2011). Constructive guidance and feedback for learning: The usefulness of exemplars, marking sheets and different types of feedback in a first year law subject. *Assessment & Evaluation in Higher Education*, 36(1), 1-11.
- Hendry, G. D., & Jukic, K. (2014). Learning about the Quality of Work That Teachers Expect: Students' Perceptions of Exemplar Marking versus Teacher Explanation. *Journal of University Teaching and Learning Practice*, 11(2), 5.
- Hendry, G. D., White, P., & Herbert, C. (2016). Providing exemplar-based 'feedforward' before an assessment: The role of teacher explanation. *Active Learning in Higher Education*, 17(2), 99-109.

- Hernández, R. (2012). Does continuous assessment in higher education support student learning? *Higher Education*, 64(4), 489-502.
- Hesse-Biber, S. N., & Leavy, P. (2010). *Handbook of emergent methods*. New York: Guilford Press.
- Hill, P., Tinker, A., & Catterall, S. (2010). From deficiency to development: the evolution of academic skills provision at one UK university. *Journal of Learning Development in Higher Education*(2).
- Hood, S. (2018). *I believe I can write: exploring the impact of writing workshops on self-efficacy beliefs of Foundation degree students* [Doctorate in Education, University of Reading]. Reading, UK.
- Hood, S. (2019). *I believe I can write: exploring the impact of writing workshops on self-efficacy beliefs of Foundation degree students* University of Reading].
- Hounsell, D., McCune, V., Hounsell, J., & Litjens, J. (2008). The quality of guidance and feedback to students. *Higher Education Research & Development*, 27(1), 55-67.
- Hove, S. E., & Anda, B. (2005). Experiences from conducting semi-structured interviews in empirical software engineering research. *Software Metrics*, 2005. 11th IEEE International Symposium.
- Huang, T. L., Friesner, D., Ho, L. H., Yeh, S. L., Lai, C. L., & Teng, C. I. (2020). Relationship among upgrades in academic qualifications, practice accreditations, self-efficacy, outcome expectations and nurses' career interest. *Journal of Nursing Management*, 28(3), 461-470.
- Hwang, G.-J., & Chang, H.-F. (2011). A formative assessment-based mobile learning approach to improving the learning attitudes and achievements of students. *Computers & Education*, 56(4), 1023-1031.
- Hyland, F. (2010). Future directions in feedback on second language writing: Overview and research agenda. *International Journal of English Studies*, 10(2), 173-182.

- Iacobucci, D., Posavac, S. S., Kardes, F. R., Schneider, M. J., & Popovich, D. L. (2015). Toward a more nuanced understanding of the statistical properties of a median split. *Journal of Consumer Psychology*, 25(4), 652-665.
- IBM. (2013). IBM SPSS statistics for windows, version 22.0. Armonk, NY: IBM Corp.
- Itua, I., Coffey, M., Merryweather, D., Norton, L., & Foxcroft, A. (2014). Exploring barriers and solutions to academic writing: Perspectives from students, higher education and further education tutors. *Journal of Further and Higher Education*, 38(3), 305-326.
- Ivala, E., & Gachago, D. (2012). Social media for enhancing student engagement: the use of Facebook and blogs at a university of technology. *South African Journal of Higher Education*, 26(1), 152-167.
- James, R., Krause, K.-L., & Jennings, C. (2010). The first year experience in Australian universities. *Canberra: Department of Education, Employment and Workplace Relations*.
- Johnston, J., Killion, J., & Oomen, J. (2005). Student satisfaction in the virtual classroom. *The Internet Journal of Allied Health Sciences and Practice*, 3(2), 1-7.
- Kenny, A., Kidd, T., Nankervis, K., & Connell, S. (2011). Mature age students access, entry and success in nurse education: An action research study. *Contemporary Nurse*, 38(1-2), 106-118.
- Krause, K.-L., Hartley, R., James, R., & McInnis, C. (2005). *The first year experience in Australian universities: Findings from a decade of national studies. Department of Education, Science and Training, Australia*.
- Leaning, M. (2015). A study of the use of games and gamification to enhance student engagement, experience and achievement on a theory-based course of an undergraduate media degree. *Journal of Media Practice*, 16(2), 155-170.

- Li, J., & De Luca, R. (2014). Review of assessment feedback. *Studies in Higher Education*, 39(2), 378-393.
- Lincoln, Y., & Guba, E. (1985). *Naturalistic inquiry*. Newbury Park, CA: Sage Publications.
- Lindahl, J. F., & Grace, D. (2018). Students' and supervisors' knowledge and attitudes regarding plagiarism and referencing. *Research Integrity and Peer Review*, 3(1), 1-10.
- Lister, M. (2015). Gamification: The effect on student motivation and performance at the post-secondary level. *Issues and Trends in Educational Technology*, 3.
- Lizzio, A., & Wilson, K. (2008). Feedback on assessment: students' perceptions of quality and effectiveness. *Assessment & Evaluation in Higher Education*, 33(3), 263-275.
- Matruglio, E. (2019). Beating the Bamboozle: Literacy Pedagogy Design and the Technicality of SFL. *Australian Journal of Teacher Education*, 44(4), 1-13.
- McCall, D., Western, D., & Petrakis, M. (2020). Opportunities for change: What factors influence non-traditional students to enrol in higher education? *Australian Journal of Adult Learning*, 60(1), 89-112.
- McCarey, M., Barr, T., & Rattray, J. (2007). Predictors of academic performance in a cohort of pre-registration nursing students. *Nurse Education Today*, 27(4), 357-364.
- McConlogue, T. (2020). *Assessment and Feedback in Higher Education: A Guide for Teachers*. London UK: UCL Press.
- McDowell, L. (2013). Assessment for learning. In L. Clouder, C. Broughan, S. Jewell, & G. Steventon (Eds.), *Improving student engagement and development through assessment: Theory and practice in higher education* (pp. 73-85). Taylor & Francis Group.

- McFarlane, D. A. (2010). Teaching Unmotivated and Under-Motivated College Students: Problems, Challenges, and Considerations. *College Quarterly*, 13(3), n3.
- McIntosh, M. J., & Morse, J. M. (2015). Situating and constructing diversity in semi-structured interviews. *Global qualitative nursing research*, 2.
- McKevitt, C. (2015). Questions for assessment: A guide for tutors' practice and student development. *Irish Journal of Academic Practice*, 4(1), 9.
- McLean, H. (2018). This is the way to teach: Insights from academics and students about assessment that supports learning. *Assessment & Evaluation in Higher Education*, 43(8), 1228-1240.
- McWilliams, R., & Allan, Q. (2014). Embedding academic literacy skills: Towards a best practice model. *Journal of University Teaching and Learning Practice*, 11(3), 8.
- Menard, S. (2018). *Applied logistic regression analysis* (Vol. 106). London: SAGE Publications.
- Mertens, D. M. (2015). *Research and evaluation in education and psychology: Integrating diversity with quantitative, qualitative, and mixed methods* (4th ed.). London: Sage Publications.
- Murray, N., & Muller, A. (2019). Developing academic literacy through a decentralised model of English language provision. *Journal of Further and Higher Education*, 43(10), 1348-1362.
- Nash, R. A., & Winstone, N. E. (2017). Responsibility-sharing in the giving and receiving of assessment feedback. *Frontiers in Psychology*, 8, 1519.
- National Health & Medical Research Council. (2011). *National Statement on Ethical Conduct in Human Research*. Canberra, ACT.
- Newlyn, D. (2013). Providing exemplars in the learning environment: The case for and against. *Education*, 30(2), 175-198.

- Newlyn, D., & Spencer, L. (2010). Improving student performance in interdisciplinary law unit assessment by providing annotated exemplars. *Journal of the Australasian Law Teachers Association*, 3(1), 67-75.
- Nicol, D. (2010). From monologue to dialogue: improving written feedback processes in mass higher education. *Assessment & Evaluation in Higher Education*, 35(5), 501-517.
- Nicol, D. J., & Macfarlane-Dick, D. (2006). Formative assessment and self-regulated learning: A model and seven principles of good feedback practice. *Studies in Higher Education*, 31(2), 199-218.
- Noon, M., & Eyre, E. (2020). A feedforward approach to teaching, learning and assessment in an undergraduate sports science module. *Journal of Hospitality, Leisure, Sport & Tourism Education*, 27, 100257.
- Noori, A. (2020). An Investigation of Undergraduate English Major Students' Difficulties in Academic Writing. *Journal of Foreign Language Teaching and Learning*, 5(2).
- Nordquist, R. (2020). *Metalanguage in Linguistics*. Retrieved August 18 from <https://www.thoughtco.com/what-is-metalanguage-1691382>
- Northall, T., Ramjan, L. M., Everett, B., & Salamonson, Y. (2016). Retention and academic performance of undergraduate nursing students with advanced standing: A mixed-methods study. *Nurse Education Today*, 39, 26-31.
- Nursing and Midwifery Board of Australia. (2017). *Enrolled Nurse Standards for Practice*. Retrieved 28 February from <https://www.nursingmidwiferyboard.gov.au/codes-guidelines-statements/professional-standards/enrolled-nurse-standards-for-practice.aspx>
- Owen, A., Daddow, A., Clarkson, G., & Nulty, D. (2021). What is the Price of Excellence in Learning and Teaching? Exploring the Costs and Benefits for Diverse Academic Staff Studying Online for a GCHE Supporting the SoTL. *Teaching & Learning Inquiry*, 9(1), 161-179.

- Owston, R., York, D., & Murtha, S. (2013). Student perceptions and achievement in a university blended learning strategic initiative. *The Internet and Higher Education*, 18, 38-46.
- Page, M. J., Moher, D., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., Shamseer, L., Tetzlaff, J. M., Akl, E. A., & Brennan, S. E. (2021). PRISMA 2020 explanation and elaboration: updated guidance and exemplars for reporting systematic reviews. *British Medical Journal*, 372, 160.
- Parkin, B., & Harper, H. (2018). *Teaching with intent: Scaffolding academic language with marginalised students*. Newtown, Australia: Primary English Teaching Association Australia.
- Paul, P., Pennell, M. L., & Lemeshow, S. (2013). Standardizing the power of the Hosmer–Lemeshow goodness of fit test in large data sets. *Statistics in Medicine*, 32(1), 67-80.
- Peters, K., Jackson, D., Andrew, S., Halcomb, E. J., & Salamonson, Y. (2011). Burden versus benefit: Continuing nurse academics' experiences of working with sessional teachers. *Contemporary Nurse*, 38(1-2), 35-44.
- Pitt, E., & Norton, L. (2017). 'Now that's the feedback I want!' Students' reactions to feedback on graded work and what they do with it. *Assessment & Evaluation in Higher Education*, 42(4), 499-516.
- Poulos, A., & Mahony, M. J. (2008). Effectiveness of feedback: The students' perspective. *Assessment & Evaluation in Higher Education*, 33(2), 143-154.
- Price, M., Handley, K., Millar, J., & O'Donovan, B. (2010). Feedback: all that effort, but what is the effect? *Assessment & Evaluation in Higher Education*, 35(3), 277-289.
- Quinton, S., & Smallbone, T. (2010). Feeding forward: Using feedback to promote student reflection and learning—a teaching model. *Innovations in Education and Teaching International*, 47(1), 125-135.



- Rae, A. M., & Cochrane, D. K. (2008). Listening to students How to make written assessment feedback useful. *Active Learning in Higher Education*, 9(3), 217-230.
- Robinson, C. C., & Hullinger, H. (2008). New benchmarks in higher education: Student engagement in online learning. *Journal of Education for Business*, 84(2), 101-109.
- Robinson, S., Pope, D., & Holyoak, L. (2013). Can we meet their expectations? Experiences and perceptions of feedback in first year undergraduate students. *Assessment & Evaluation in Higher Education*, 38(3), 260-272.
- Robson, S., Leat, D., Wall, K., & Lofthouse, R. (2012). Feedback or feed forward? Supporting Master's students through effective assessment to enhance future learning. In J. Ryan (Ed.), *Cross Cultural Teaching and Learning for Home and International Students: Internationalisation of Pedagogy and Curriculum in Higher Education* (pp. 53-69). Routledge.
- Rowley, J. (2012). Conducting research interviews. *Management Research Review*, 35(3/4), 260-271.
- Rubin, M., Scevak, J., Southgate, E., Macqueen, S., Williams, P., & Douglas, H. (2018). Older women, deeper learning, and greater satisfaction at university: Age and gender predict university students' learning approach and degree satisfaction. *Journal of Diversity in Higher Education*, 11(1), 82.
- Ryan, R. M., & Deci, E. L. (2017). *Self-determination theory: Basic psychological needs in motivation, development, and wellness*: Guilford Publications.
- Sadler, D. R. (2010). Beyond feedback: Developing student capability in complex appraisal. *Assessment & Evaluation in Higher Education*, 35(5), 535-550.
- Salamonson, Y., Andrew, S., Clauson, J., Cleary, M., Jackson, D., & Jacobs, S. (2011). Linguistic diversity as sociodemographic predictor of nursing program progression and completion. *Contemporary Nurse*, 38(1-2), 84-93.

- Salamonson, Y., Ramjan, L., Lombardo, L., Lanser, L., Fernandez, R., & Griffiths, R. (2012). Diversity and demographic heterogeneity of Australian nursing students: a closer look. *International Nursing Review*, 59(1), 59-65.
- Sambell, K., & Graham, L. (2020). "We need to change what we're doing." Using pedagogic action research to improve teacher management of exemplars. *Practitioner Research in Higher Education*, 13(1), 3-17.
- Scager, K., Boonstra, J., Peeters, T., Vulperhorst, J., & Wiegant, F. (2016). Collaborative learning in higher education: Evoking positive interdependence. *CBE—Life Sciences Education*, 15(4), ar69.
- Schleppegrell, M. J. (2013). The role of metalanguage in supporting academic language development. *Language Learning*, 63, 153-170.
- Scoles, J., Huxham, M., & McArthur, J. (2012). No longer exempt from good practice: Using exemplars to close the feedback gap for exams. *Assessment & Evaluation in Higher Education*, 38(6), 631-645.
- Severiens, S., & Ten Dam, G. (2012). Leaving college: A gender comparison in male and female-dominated programs. *Research in Higher Education*, 53(4), 453-470.
- Sheard, M. (2009). Hardiness commitment, gender, and age differentiate university academic performance. *British Journal of Educational Psychology*, 79(1), 189-204.
- Smyth, S., Houghton, C., Cooney, A., & Casey, D. (2012). Students' experiences of blended learning across a range of postgraduate programmes. *Nurse Education Today*, 32(4), 464-468.
- Snowball, J. (2014). Using interactive content and online activities to accommodate diversity in a large first year class. *Higher Education*, 67(6), 823-838.
- Sogunro, O. A. (2015). Motivating factors for adult learners in higher education. *International Journal of Higher Education*, 4(1), 22-37.

- Stansbury, J. A., & Earnest, D. R. (2017). Meaningful gamification in an industrial/organizational psychology course. *Teaching of Psychology*, 44(1), 38-45.
- Stone, C. (2008). Listening to individual voices and stories-the mature-age student experience. *Australian Journal of Adult Learning*, 48(2), 263.
- Stuart, M., Lido, C., Morgan, J., Solomon, L., & May, S. (2011). The impact of engagement with extracurricular activities on the student experience and graduate outcomes for widening participation populations. *Active Learning in Higher Education*, 12(3), 203-215.
- Subedi, D. (2016). Explanatory sequential mixed method design as the third research community of knowledge claim. *American Journal of Educational Research*, 4(7), 570-577.
- Subhash, S., & Cudney, E. A. (2018). Gamified learning in higher education: A systematic review of the literature. *Computers in Human Behavior*, 87, 192-206.
- Sweeney, M.-R., Kirwan, A., Kelly, M., Corbally, M., O'Neill, S., Kirwan, M., Hourican, S., Matthews, A., & Hussey, P. (2016). Transition to blended learning: experiences from the first year of our blended learning Bachelor of Nursing Studies programme. *Contemporary Nurse*, 52(5), 612-624.
- Taylor, P., Mather, G., & Rowe, A. (2011). The personal dimension in teaching: why students value feedback. *International Journal of Educational Management*, 25(4), 343-360.
- Tight, M. (2019). Mass higher education and massification. *Higher Education Policy*, 32(1), 93-108.
- To, J., & Carless, D. (2015). Making productive use of exemplars: Peer discussion and teacher guidance for positive transfer of strategies. *Journal of Further and Higher Education*, 40(6), 746-764.

- To, J., & Liu, Y. (2018). Using peer and teacher-student exemplar dialogues to unpack assessment standards: challenges and possibilities. *Assessment & Evaluation in Higher Education*, 43(3), 449-460.
- Tomas, L., Lasen, M., Field, E., & Skamp, K. (2015). Promoting Online Students' Engagement and Learning in Science and Sustainability Preservice Teacher Education. *Australian Journal of Teacher Education*, 40(11), n11.
- Tong, A., Sainsbury, P., & Craig, J. (2007). Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *International Journal for Quality in Health Care*, 19(6), 349-357.
- University of Wollongong. (2017). *Higher Degree Research (HDR) Thesis by Compilation Guidelines*.
- Uribe, S. N., & Vaughan, M. (2017). Facilitating student learning in distance education: a case study on the development and implementation of a multifaceted feedback system. *Distance Education*, 38(3), 288-301.
- van der Kleij, F. M. (2019). Comparison of teacher and student perceptions of formative assessment feedback practices and association with individual student characteristics. *Teaching and Teacher Education*, 85, 175-189.
- Vardi, I. (2013). Effectively feeding forward from one written assessment task to the next. *Assessment & Evaluation in Higher Education*, 38(5), 599-610.
- Voelkel, S. (2013). Combining the formative with the summative: the development of a two stage online test to encourage engagement and provide personal feedback in large classes. *Research in Learning Technology*, 21.
- Wan Chik, W., Salamonson, Y., Everett, B., Ramjan, L. M., Attwood, N., Weaver, R., Saad, Z., & Davidson, P. M. (2012). Gender difference in academic performance of nursing students in a Malaysian university college. *International Nursing Review*, 59(3), 387-393.

- Wanner, T., & Palmer, E. (2018). Formative self-and peer assessment for improved student learning: the crucial factors of design, teacher participation and feedback. *Assessment & Evaluation in Higher Education*, 43(7), 1032-1047.
- Weaver, M. R. (2006). Do students value feedback? Student perceptions of tutors' written responses. *Assessment & Evaluation in Higher Education*, 31(3), 379-394.
- Western Sydney University. (2020). *Student Demographics*. Retrieved July 14 from [https://www.westernsydney.edu.au/equity-and-diversity/cultural\\_diversity/culturally\\_and\\_linguistically\\_diverse\\_cald](https://www.westernsydney.edu.au/equity-and-diversity/cultural_diversity/culturally_and_linguistically_diverse_cald)
- Whittemore, R., & Knafl, K. (2005). The integrative review: updated methodology. *Journal of Advanced Nursing*, 52(5), 546-553.
- Wiliam, D. (2011). What is assessment for learning? *Studies in Educational Evaluation*, 37(1), 3-14.
- Wimshurst, K., & Manning, M. (2012). Feed-forward assessment, exemplars and peer marking: evidence of efficacy. *Assessment & Evaluation in Higher Education*, 38(4), 451-465.
- Wingate, U. (2012). Using academic literacies and genre-based models for academic writing instruction: A 'literacy' journey. *Journal of English for Academic Purposes*, 11(1), 26-37.
- Wright, R. E. (1995). Logistic regression. In L. G. Grimm & P. R. Yarnold (Eds.), *Reading and understanding multivariate statistics* (pp. 217-244). American Psychological Association.
- Wygall, D. E., Watty, K., & Stout, D. E. (2014). Drivers of teaching effectiveness: Views from accounting educator exemplars in Australia. *Accounting Education*, 23(4), 322-342.
- Xu, Y. (2019). Scaffolding Students' Self-Assessment of Their English Essays with Annotated Samples: A Mixed-Methods Study. *Chinese Journal of Applied Linguistics*, 42(4), 503-526.

- Yevelson-Shorsher, A., & Bronstein, J. (2018). Three perspectives on information literacy in academia: Talking to librarians, faculty, and students. *College & Research Libraries*, 79(4), 535.
- Yildirim, I. (2017). The effects of gamification-based teaching practices on student achievement and students' attitudes toward lessons. *The Internet and Higher Education*, 33, 86-92.
- Yorke, J., Gibson, W., & Wilkinson, H. (2010). Towards sustainable marking practices and improved quality of feedback in short-answer assessments. ATN Assessment Conference,
- Yorke, M. (2003). Formative assessment in higher education: Moves towards theory and the enhancement of pedagogic practice. *Higher Education*, 45(4), 477-501.
- Yucel, R., Bird, F. L., Young, J., & Blanksby, T. (2014). The road to self-assessment: exemplar marking before peer review develops first-year students' capacity to judge the quality of a scientific report. *Assessment & Evaluation in Higher Education*, 39(8), 971-986.
- Zepke, N., & Leach, L. (2010). Improving student engagement: Ten proposals for action. *Active Learning in Higher Education*, 11(3), 167-177.
- Zhang, L., & Zheng, Y. (2018). Feedback as an assessment for learning tool: How useful can it be? *Assessment & Evaluation in Higher Education*, 43(7), 1120-1132.
- Zheng, R. X., Everett, B., Glew, P., & Salamonson, Y. (2014). Unravelling the differences in attrition and academic performance of international and domestic nursing students with English as an additional language. *Nurse Education Today*, 34(12), 1455-1459.

# Appendices

**Appendix A. Paper 1**

**Appendix B. HREC Approval**

**Appendix C. Annotated Exemplar**

**Appendix D. Paper 2**

## **Appendix A. Paper 1**





Contents lists available at ScienceDirect

Nurse Education Today

journal homepage: [www.elsevier.com/locate/nedt](http://www.elsevier.com/locate/nedt)

## Review

# Students use of exemplars to support academic writing in higher education: An integrative review

Rebekah Carter<sup>a,\*</sup>, Yenna Salamonson<sup>b</sup>, Lucie M. Ramjan<sup>c</sup>, Elizabeth Halcomb<sup>d</sup><sup>a</sup> Western Sydney University, School of Nursing and Midwifery, Locked Bag 1797, Penrith, NSW 2751, Australia<sup>b</sup> Western Sydney University, School of Nursing and Midwifery, Centre for Applied Nursing Research (CANR), Ingham Institute for Applied Medical Research, Australia<sup>c</sup> Western Sydney University, School of Nursing and Midwifery, Centre for Applied Nursing Research (CANR), Ingham Institute for Applied Medical Research, Locked Bag 1797, Penrith, NSW 2751, Australia<sup>d</sup> School of Nursing, Faculty of Science, Medicine & Health, University of Wollongong, NSW 2522, Australia

## ARTICLE INFO

## Keywords:

Exemplars  
Annotated exemplars  
Feedback  
Structure  
Peer review  
Tertiary students

## ABSTRACT

**Background:** Timely and meaningful feedback is essential to promote active learning and student engagement with learning. However, achieving this remains elusive, particularly in undergraduate nursing programs that admit large student cohorts. One strategy to provide meaningful *en masse* feedback is to provide feed-forward support by using exemplars. To date, there has been limited evaluation of the effectiveness of this feedback strategy.

**Objective:** To review the impact of using exemplars as a feedback strategy to support student academic writing in higher education.

**Data Sources and Review Method:** A systematic search of electronic databases for original research papers published between 2000 and 2017 that used exemplars to support student's academic writing in higher education. An integrative review methodology was utilised to identify emerging themes.

**Results:** Ten papers met the inclusion criteria, revealing four themes; 1) exemplars as a tool for structuring and preparing assessment activities, 2) appraising exemplars provided as a teaching and learning activity, 3) the impact of exemplar use on academic performance, and 4) students' satisfaction of exemplars as a learning tool.

**Conclusion:** Despite the diverse approaches in the use of exemplars, this review highlighted that students value exemplars as a teaching tool. However, the benefits of exemplar use were not always reflected in students' academic performance. Further research is required, particularly in a nursing context, to understand the impact of exemplars on student learning.

## 1. Introduction

Assessment is an essential activity in higher education, as it provides evidence of student learning (Hernández, 2012). However, despite being provided with the same instruction, guidance and assessment support, undergraduate nursing students may have a different interpretation of what is required to successfully complete assessment tasks (Wiliam, 2011). Such differing interpretations can, subsequently, impact on assessment outcomes.

Assessment in higher education is commonly classified into two broad categories, formative and summative. Whilst formative assessments are used to scaffold learning, summative assessments measure academic achievement (Crisp, 2012). Formative assessment encourages learning as students engage with feedback to self-assess and identify

areas to improve (Crisp, 2012). Formative assessments engage students and facilitate them to take ownership of their learning, they can also be diagnostic, as they enable students to reflect (Cox et al., 2007), identify gaps in knowledge and correct mistakes (Fluckiger et al., 2010). Formative assessments are also used by academic staff to guide their teaching and monitor if they have achieved planned student learning outcomes (Hwang and Chang, 2011). Hence, there is a need to include both formative and summative assessments to ensure nursing students engage with feedback provided to learn beyond what is required to pass and also to consider their overall learning needs (Cox et al., 2007; Hounsell et al., 2008).

Feedback is a core element of formative assessment (Fluckiger et al., 2010). Timely and meaningful feedback promotes active learning, deeper understanding and scaffolds student learning (Carless, 2006;

\* Corresponding author.

E-mail addresses: [Rebekah.carter@westernsydney.edu.au](mailto:Rebekah.carter@westernsydney.edu.au) (R. Carter), [y.salamonson@westernsydney.edu.au](mailto:y.salamonson@westernsydney.edu.au) (Y. Salamonson), [l.ramjan@westernsydney.edu.au](mailto:l.ramjan@westernsydney.edu.au) (L.M. Ramjan), [ehalcomb@uow.edu.au](mailto:ehalcomb@uow.edu.au) (E. Halcomb).

<https://doi.org/10.1016/j.nedt.2018.02.038>

Received 27 August 2017; Received in revised form 11 February 2018; Accepted 27 February 2018  
0260-6917/ © 2018 Published by Elsevier Ltd.

Nicol, 2010). Despite its potential value to learning and academic performance (Cathcart et al., 2013; Yorke, 2003), provision of timely feedback remains one of the most challenging areas from the nursing students' perspective (Scoles et al., 2012).

Using a feed-forward approach is one strategy to provide timely, meaningful and focused feedback to nursing students. Feed-forward is not a new concept, feed-forward approaches have previously been reported in the literature (Duncan, 2007; Robson et al., 2012; Scoles et al., 2012). Feed-forward has been defined as a process where students attempt an assessment task, receive feedback and then apply the new understanding to subsequent assessment items (Carless, 2006; Wimshurst and Manning, 2012). A feed-forward approach using exemplars allows students to make sense of the feedback and how it should be applied to improve academic writing (Quinton and Smallbone, 2010; Rae and Cochrane, 2008). Exemplars are an important tool for clarifying expected standards and quality of work (Newlyn and Spencer, 2010). Students highly value the use of annotated exemplars (Handley and Williams, 2011) and believe them to be an effective mechanism to scaffold student learning because they provide an example of a desired response and information to guide the formation of the assessment item (Bruno and Santos, 2010). For this reason, to fully understand the impact of exemplars to support student's academic writing, it is necessary to review the literature.

## 2. The Review

### 2.1. Aim

This paper seeks to critically review student perceptions of exemplars and the impact of using exemplars as a feedback strategy to support academic writing in higher education.

### 2.2. Method

The integrative review process described by Whittemore and Knafl (2005) was used to guide this review.

### 2.3. Search Strategy

A three phased search strategy was utilised, consisting of an initial structured electronic database search, followed by searching the reference lists of identified papers, as well as hand searching in relevant journals. The database search sought to identify primary research papers reporting the use of annotated exemplars to support students' academic writing published in the English language between 2000 and 2017. CINAHL, Education Research Complete + ERIC, Informit, ProQuest Central, Scopus, Taylor & Francis and Web of Science databases were searched using search terms including; Feedforward; Feed forward; feeding forward; strategie\*; higher education; annotated exemplars; video feedback; interactive feedback and individualised feedback. Papers were excluded if they were not original research, did not evaluate an annotated exemplar intervention, if participants were not studying at a degree level or higher in a tertiary setting, or were duplicate articles of the same research project.

### 2.4. Search Outcome

This search initially yielded 55 potentially relevant papers (Fig. 1). After checking for relevance and following removal of duplicates, 33 papers remained. A further 20 papers were excluded because they did not meet the inclusion criteria. This left 13 papers which were subjected to full review by two authors. After this review, 10 papers were identified as meeting the inclusion criteria (see Fig. 1).

### 2.5. Quality Appraisal

The CASP (2006) template was used to systematically appraise the quality of identified papers. The tool facilitated appraisal of the clarity of the aim, appropriateness of the research design, methodology and data collection and rigour of the data analysis (Table 1). Additionally, the tool revealed whether ethical considerations were addressed, a statement of finding was included and that the research was viable (CASP, 2006).

### 2.6. Data Abstraction & Synthesis

Data were abstracted from each paper into a summary table (Table 2). Once extracted these data were examined for common themes using a process of thematic analysis similar informed by Braun and Clarke (2006). Each paper was reviewed and, once familiar with the data, the researchers independently generated initial codes. This process continued identifying themes and subthemes (Braun and Clarke, 2006). Once this process was completed the authors collaborated to discuss their findings and achieve a consensus to reduce subjective bias.

## 3. Results

### 3.1. Methodological Features

All 10 included studies originate from either the United Kingdom ( $n = 3$ ; 30%) or Australia ( $n = 7$ ; 70%). Included studies drew on a combination of undergraduate and postgraduate tertiary cohorts, enrolled in a range of diverse disciplines. Despite the diversity of disciplines, the search strategies used failed to yield any articles from nursing education. As can be seen in Table 2, sample sizes varied significantly, ranging from 50 (Hendry and Anderson, 2013) to > 1100 participants (Yucel et al., 2014). Six studies used exemplars only (Hendry and Anderson, 2013; Hendry et al., 2012; Hendry and Jukic, 2014; Hendry et al., 2016; Scoles et al., 2012; Wimshurst and Manning, 2012) and four annotated the exemplars to support students' preparation for assessment (Bell et al., 2013; Bird and Yucel, 2013; Handley and Williams, 2011; Newlyn and Spencer, 2010).

Four key themes emerged from the included papers, namely; 1) exemplars as a tool for structuring and preparing assessment activities, 2) appraising exemplars provided as a teaching and learning activity, 3) the impact of exemplar use on academic performance, and 4) students' satisfaction of exemplars as a learning tool.

### 3.2. Exemplars as a Tool for Structuring and Preparing Assessment Tasks

Five papers (50%) reported that participants believed the use of exemplars assisted them to improve the structure of their assessment tasks (Hendry and Anderson, 2013; Hendry et al., 2012; Hendry and Jukic, 2014; Hendry et al., 2016; Wimshurst and Manning, 2012). These studies described a variety of different assessment tasks, including examination answers (Hendry and Jukic, 2014), essays (Hendry and Anderson, 2013), letters (Hendry et al., 2012) critical reviews (Hendry et al., 2016) and case studies (Wimshurst and Manning, 2012). Additionally, students found using exemplars showed them how to better present their information (Wimshurst and Manning, 2012) and when coupled with the teacher's explanation, provided them with a clearer understanding of expected standards of work (Bell et al., 2013; Hendry and Anderson, 2013; Hendry et al., 2016; Wimshurst and Manning, 2012).

Hendry et al. (2012) reported that participants rated the exemplars higher than the marking sheet for guidance. Despite the positive impact of exemplars on the structure of work, two other studies (Bell et al., 2013; Handley and Williams, 2011) found that exemplars and associated resources, such as grade descriptors and marking criteria were

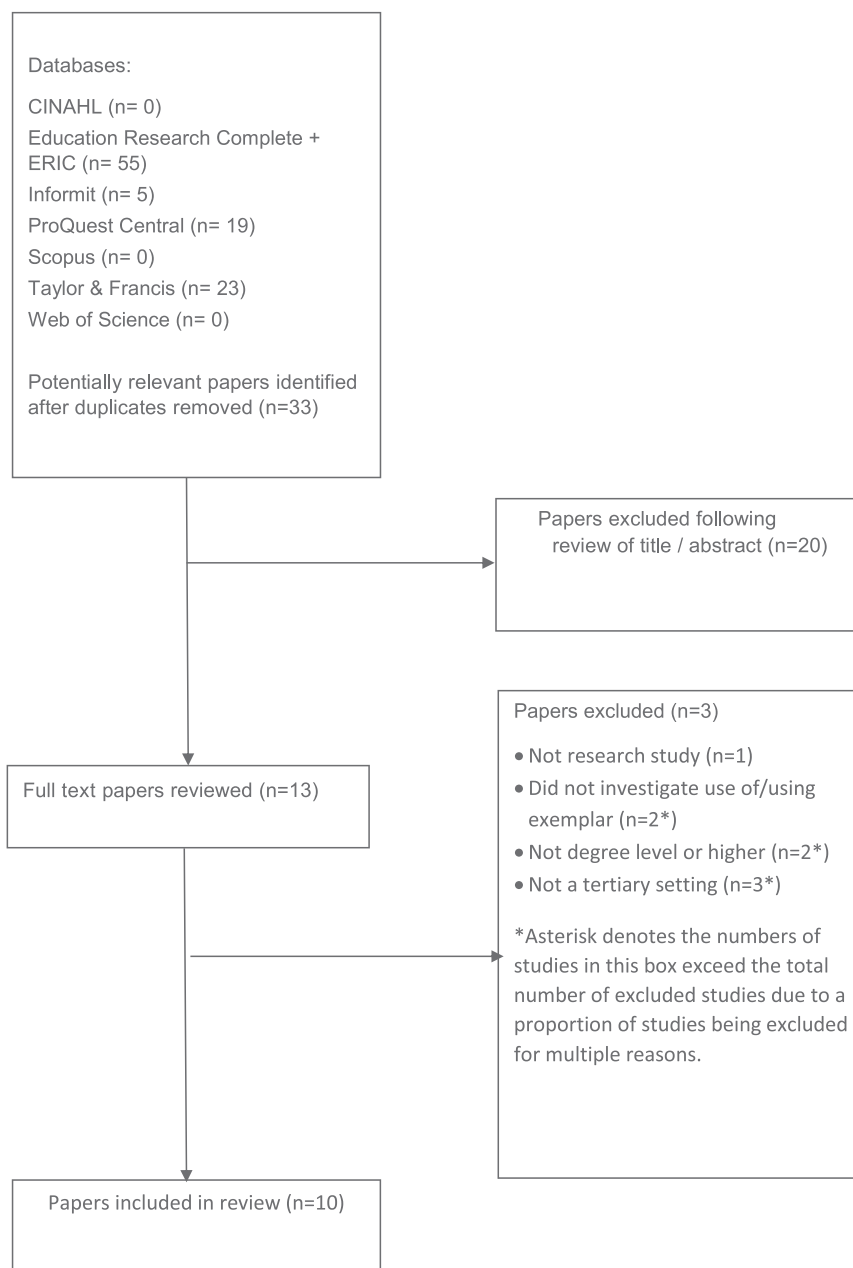


Fig. 1. PRISMA flow diagram.

not useful in structuring their task as they were 'restrictive' and 'subjective' or limited creativity (Hendry et al., 2016).

### 3.3. Appraising Exemplars Provided as a Teaching and Learning Activity

Using exemplars as a teaching and learning activity to prepare for assessment tasks received mixed responses. Five studies (50%) explored the impact of students appraising exemplars (Hendry and Anderson, 2013; Hendry and Jukic, 2014; Hendry et al., 2016; Wimshurst and Manning, 2012; Yucel et al., 2014). These studies reported various strategies including, student appraisal of exemplars only (Wimshurst

and Manning, 2012), group appraisal of exemplars and marking classes which required students to discuss and/or determine model answers (Hendry and Anderson, 2013; Hendry and Jukic, 2014; Hendry et al., 2016; Yucel et al., 2014). Whilst the specific techniques varied between papers, all studies required students to either appraise a peer's work or critically appraise an exemplar.

Appraising exemplars in a class environment led to an increase in group participation (Wimshurst and Manning, 2012), facilitated students understanding of the variable opinions held about exemplar quality (Hendry and Anderson, 2013; Hendry et al., 2016; Yucel et al., 2014) and facilitated learning from each other's errors (Yucel et al.,

**Table 1**  
CASP analysis.

Citation	Aim	Methodology	Design	Sample/ recruitment	Data collection	Relationships	Ethical Issues	Data analysis	Statement of findings	How valuable is research?
Bell et al. (2013)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Handley and Williams (2011)	✓	✓	✓	✓	✓	✓	X	✓	✓	✓
Hendry et al. (2016)	✓	✓	✓	✓	✓	✓	X	✓	✓	✓
Hendry and Anderson (2013)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Hendry and Jukic (2014)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Hendry et al. (2012)	X	✓	✓	✓	✓	✓	✓	✓	✓	✓
Newlyn and Spencer (2010)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Scoles et al. (2012)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Wimshurst and Manning (2012)	✓	✓	✓	✓	✓	✓	X	✓	✓	✓
Yucel et al. (2014)	✓	✓	✓	✓	✓	✓	X	✓	✓	✓

2014). These class discussion exercises also clarified criteria and/or standards (Handley and Williams, 2011; Yucel et al., 2014) and were helpful to students in improving their own assessment submissions (Hendry et al., 2016; Yucel et al., 2014).

Not all student responses to the use of exemplars were favourable. Whilst appraising exemplars in a class environment was a positive experience for many, some students reported that it was challenging because student interpretations of the quality of exemplars differed (Hendry and Jukic, 2014; Hendry et al., 2016). Yucel et al. (2014) also reported that some participants found these exercises were unhelpful. These participants were also dissatisfied with the quality or quantity of the feedback given, believed their peer was inexperienced or were disinterested in the activity itself.

### 3.4. Impact of Exemplar use on Academic Performance

An improvement in assessment grade is the best indicator of the positive impact of a teaching and learning intervention. However, only six studies (60%) reported an impact upon the grade awarded for the assessment task as an outcome measure (Handley and Williams, 2011; Hendry and Jukic, 2014; Newlyn and Spencer, 2010; Scoles et al., 2012; Wimshurst and Manning, 2012; Yucel et al., 2014). Four studies (40%) concluded that exemplars had a positive impact on grades for both undergraduate and post graduate students (Hendry and Jukic, 2014; Newlyn and Spencer, 2010; Scoles et al., 2012; Wimshurst and Manning, 2012). Yucel et al. (2014) found that there was no improvement when exemplars were used for the first time. In fact, students who were provided with exemplars performed significantly worse than those who were not. However, there was a noted improvement in subsequent assessment tasks; more participants who used the intervention scored higher marks for the second report than those who did not use the exemplar for their first assessment task (Yucel et al., 2014). Handley and Williams (2011) found that there was no increase in grades awarded following use of the exemplar.

### 3.5. Students' Satisfaction of Exemplars as a Learning Tool

Eight studies (80%) reported the satisfaction of exemplars from the student perspective (Bell et al., 2013; Handley and Williams, 2011; Hendry and Anderson, 2013; Hendry et al., 2012; Hendry and Jukic, 2014; Hendry et al., 2016; Scoles et al., 2012; Yucel et al., 2014). Overall students perceived annotated exemplars as useful when used as a learning tool for class discussions facilitated by a tutor because they improved confidence and developed critical thinking skills (Hendry and Anderson, 2013; Hendry et al., 2012; Hendry and Jukic, 2014; Scoles et al., 2012). However, the perceived benefits varied somewhat

between the studies. Students found exemplars useful because they provided standards and clarified expectations (Bell et al., 2013; Yucel et al., 2014). However, in two studies the findings were mixed, a small proportion of participants reported they found annotated exemplars not useful (Bell et al., 2013; Handley and Williams, 2011).

## 4. Discussion

This review has shown that, in higher education, exemplars are an important tool for clarifying expected standards of assessment (Hendry and Anderson, 2013; Hendry et al., 2012; Hendry and Jukic, 2014; Hendry et al., 2016; Wimshurst and Manning, 2012). Using exemplars as a learning tool is further enhanced when supported by class discussion because it allows for clarification of criteria and standards (Handley and Williams, 2011). Students used exemplars for a variety of reasons but many used them to provide structure or as a template for the assessment task; providing specific information on the layout and structure before they started writing the assessment (Li and De Luca, 2014). In addition to providing a guide or framework the review highlighted that participants believed they had a clearer understanding of the topic when teachers discussed the exemplars with students (Hendry et al., 2016). This is supported by To and Carless (2015) who describe how discussion was helpful for students to support understanding of the task requirements.

This review has demonstrated that exemplar appraisal activities lead to an increase in engagement with the task and subsequently group participation. This is similar to the finding of Nicol (2010) who reported greater engagement with a task when peer to peer feedback is carried out. Peer discussion is useful in allowing students to generate ideas and negotiate meanings (To and Carless, 2015). Exemplars as a learning tool has the potential to improve a student's confidence and critical thinking skills but this depends on other factors, for example, the way the teacher explains how to use exemplars to critically evaluate their work or how the exemplar is used by the student (Sadler, 2010). Peer feedback and appraisal activities are also important in practice disciplines such as nursing, because they prepare participants for feedback and performance management processes in the workplace (Agius and Wilkinson, 2014).

Mixed findings of improvement in academic performance highlighted in this review may indicate that the use of exemplars is only one strategy and may not be the solution for all students. Bell et al. (2013) reported a small number of students believed exemplars may stultify creativity because they were too restrictive. Whilst Yucel et al. (2014) found participants who used exemplars did not demonstrate an improvement in academic performance the first year, both Yucel et al. (2014) and Newlyn and Spencer (2010) found those who used the

**Table 2**  
Summary of included studies.

Citation	Country	Sample	Assessment/intervention	Method & data collection	Results	Limitations & comments
Bell et al. (2013)	UK	119 (45% of enrolled students) of 1st year UG accounting students	Assessment: Group and individual written assignment with group presentation on an ethical issue from a newspaper article. Intervention: Annotated exemplar and grade descriptors provided in Week 1	1. Written student reflection embedded within assessment task	<ul style="list-style-type: none"> <li>87% found resources helpful</li> <li>Resources found to be useful when seeking precise guidance, and in providing the standards required, including an indication of lecturers' expectations.</li> <li>Resources provided a framework, assisted with their learning and assisted them achieved the desired marks</li> <li>A few participants reported the resources to be restrictive, unnecessary and not helpful</li> <li>High hit rates of &gt; 4 per participant on the of the annotated exemplars on the learning platform</li> <li>73% of participants found the exemplars to be very useful</li> <li>Open-ended survey questions showed that participants valued the exemplars highly</li> <li>No group differences were detected between participants who used and those who did not use the exemplars</li> </ul>	<ul style="list-style-type: none"> <li>Data collected as part the assessment - impact negative feedback.</li> <li>Evaluation of the assessment was global (i.e. included other resources beyond the annotated exemplar).</li> </ul>
Handley and Williams (2011)	UK	2nd year UG business students ( $n = 400$ Semester 1; $n = 325$ Semester 2)	Assessment: Written assignment to be completed by student pairs Intervention: Exemplars used sourced from previous students (similar in structure but different topic), and annotated with feedback	<ol style="list-style-type: none"> <li>Participants' hit rates of exemplars</li> <li>Online survey</li> <li>Informal conversations with participants</li> </ol>	<ul style="list-style-type: none"> <li>Low (15%) response rate from the online survey.</li> <li>Positive, but weak (<math>r = 0.28</math>, <math>p &lt; 0.01</math>) correlation between participant hit rates and coursework marks.</li> </ul>	
Hendry et al. (2016)	Australia	81 2nd year UG animal science students	Assessment: Critical review of scientific paper. Intervention: Two de-identified exemplars of previous student's critical reviews of a different article. Students asked to grade exemplars then discuss in class. Tutor facilitated in class discussion.	1. Survey	<ul style="list-style-type: none"> <li>Participants reported they learned the structure of a good essay</li> <li>Discussion of the essay exemplars gave participants more confidence to write their assignment</li> <li>Teachers explanation of expected standard was useful</li> <li>Participants with higher grades reported that the exemplars made it easier for them to be creative with their own assignment than those who achieved lower grades.</li> <li>Exemplars assisted participants to learn about how to structure their essay and teacher expectations.</li> </ul>	<ul style="list-style-type: none"> <li>Response rate was 49%</li> <li>Feedback from participants obtained after the grades of assessment has been made known to participants, which was likely to influence their responses</li> <li>Positive correlation between participants perception of usefulness of exemplar marking and discussion, and participant's achievement in the assessment task (<math>r = 0.56</math>, <math>p &lt; 0.001</math>)</li> </ul>
Hendry and Anderson (2013)	Australia	24 UG education students and 26 PG Master of Teaching students	Assessment: Written essay Intervention: Students given exemplar essays to grade before class using marking guide. Then held class group discussion about essay and grades. Tutor facilitated in class discussion	<ol style="list-style-type: none"> <li>Paper survey</li> <li>Individual interviews</li> <li>Focus groups</li> </ol>	<ul style="list-style-type: none"> <li>Small sample sizes despite the 100% response rate</li> <li>No difference in assessment performances as indicated by distribution of grades, compared to students from previous years.</li> </ul>	
Hendry and Jukic (2014)	Australia	26 UG & 47 PG students in a nutritional assessment subject	Assessment: Final exam Intervention: Exemplars of previous students. Participants given a high and a low scoring exemplar to mark. Tutor then marked both exemplars in class and provided rationale.	<ol style="list-style-type: none"> <li>Online survey</li> <li>Focus groups</li> </ol>	<ul style="list-style-type: none"> <li>Both UG and PG cohorts achieved significantly higher scores in exams than the previous year's cohort (<math>p &lt; 0.001</math>)</li> <li>Marking class led participants to think about the quality of their exam answers</li> <li>Participants reported thought that they learned the structure of a good exam answer</li> <li>Teacher's explanation found to be the most useful aspect of the marking class</li> <li>One thirds found discussing in groups differences of interpretation challenging</li> <li>An increase in confidence to write a quality letter was reported</li> <li>Exemplars provided participants with a guide for the style of language to be used and assisted with structuring their letter</li> </ul>	<ul style="list-style-type: none"> <li>Response rate of 25%</li> <li>Small participant numbers in focus groups</li> <li>Focus group undertaken after results final exam results known and may have biased responses</li> </ul>
Hendry et al. (2012)	Australia	181 1st UG Law students. Five tutors	Assessment: Legal letter Intervention: Students are asked to grade 3 past papers (fail, credit & distinction) using marking criteria. Tutors led class discussion providing a rationale for grades.	<ol style="list-style-type: none"> <li>Focus groups</li> <li>Survey</li> <li>Individual interviews</li> </ol>	<ul style="list-style-type: none"> <li>Response rate was 37%</li> <li>Variability in the using exemplars in class the teaching approach in using the exemplars was inconsistent.</li> </ul>	(continued on next page)

Table 2 (continued)

Citation	Country	Sample	Assessment/intervention	Method & data collection	Results	Limitations & comments
Newlyn and Spencer (2010)	Australia	UG Business Law Students. Summer 2008/09 ( <i>n</i> = 95) & 2009/10 ( <i>n</i> = 30)	Assessment: Final exam Intervention: 5 past exam papers annotated with comments uploaded onto eLearning portal (fail, Pass, Credit, Distinction & High Distinction)	Exam marks	<ul style="list-style-type: none"> <li>The discussion of exemplars in class with teacher was reported to be helpful</li> <li>Those with the tutor who did not discuss the exemplar scored lower on the assessment than others</li> <li>Positive impact on students' performance as reflected in students' final exam results, compared to students' performance in previous years</li> </ul>	<ul style="list-style-type: none"> <li>True sample size unknown. Exemplars were downloaded by 212 students in 2008/2009 &amp; 84 students in 2009/2010 but this exceeded the number of students enrolled at the time.</li> </ul>
Scoles et al. (2012)	UK	UG & PG students ( <i>n</i> = 520) enrolled in 12 modules of life sciences	Assessment: Final exam Intervention: 3 past exam papers annotated with feedback and comments uploaded onto eLearning portal (average, good & excellent quality)	<ol style="list-style-type: none"> <li>Students' access to exemplars</li> <li>Exam marks</li> <li>Group interviews with students</li> <li>Individual lecturer interviews</li> </ol>	<ul style="list-style-type: none"> <li>Those who used the exemplars performed better in the final exam than those who did not (mean: 54.8% versus 48.7%)</li> <li>Interviews revealed that exemplars were received positively by participants</li> <li>Student participants reported that the exemplars help them understand assessment requirements</li> </ul>	<ul style="list-style-type: none"> <li>Interviewees were self-selected and may not be representative of students across the performance spectrum.</li> <li>A high-achieving student and several international students participate in the interviews, hence, not representative of the overall profile of student cohort</li> </ul>
Wimshurst and Manning (2012)	Australia	97 UG Youth Justice students	Assessment: 1) Case study report with two parts (Parts A & B), and a final exam. Intervention: Exemplars were used as an activity for Part A of the case-study assessment Feedback on Part A performance before submission of Part B of the case study assessment.	<ol style="list-style-type: none"> <li>Student characteristics including GPA</li> <li>Case study and exam marks</li> <li>Optional submission of students' reflection of the activity</li> </ol>	<ul style="list-style-type: none"> <li>Demonstrated better performance of case-study assessment compared to previous cohort</li> <li>No significant difference in exam performance compared to previous cohort.</li> <li>Participants found exemplars increased awareness of expected standards</li> <li>Participants reported exemplars showed them how to integrate descriptions and observations</li> </ul>	<ul style="list-style-type: none"> <li>Students' higher performance in the case study assessment compared to previous cohort could also be contributed by the class and individual feedback provided, in addition to the support received from engaging with the exemplars.</li> </ul>
Yucel et al. (2014)	Australia	1st year UG biology students 2009 ( <i>n</i> = 373) 2010 ( <i>n</i> = 403) & 2011 ( <i>n</i> = 488)	Assessment: Submission of two scientific reports. Intervention: Two exemplars (very good and average). Students asked to mark two exemplars (very good and average) and justify marks awarded as a group activity. Students required to bring draft report for blinded peer marking before final submission.	<ol style="list-style-type: none"> <li>Report marks for 2010 cohort</li> <li>Survey for 2011 cohort.</li> </ol>	<ul style="list-style-type: none"> <li>Students who were provided with exemplars performed significantly worse (i.e. 2010 cohort) than those who did not have the exemplars (i.e. 2009 cohort), despite similar academic entry score of the two cohorts</li> <li>Students with exemplar support (i.e. 2010 cohort) improved their assessment performance in the second report; this was not the case with the 2009 cohort (i.e. those who did not receive exemplar support)</li> <li>Survey respondents reported marking and discussion of exemplars clarified expectations and were helpful</li> </ul>	<ul style="list-style-type: none"> <li>Marker bias may have adversely affected report results in 2010</li> <li>The authors did not report on the academic performance of students in 2011 cohort, who also received exemplar support, but only reported on students' feedback on the use of exemplars in this subject.</li> </ul>



exemplars for the first assessment task performed better in the following assessment task than those who did not. This is not dissimilar to another study by Vardi (2013) who investigated the impact of feedback using exemplars. Vardi (2013) found there was no demonstrated improvement in grades when participants first used exemplars but grades did improve the following year. Further, these results differ from Wimshurst and Manning (2012) who noted an improvement in report marks awarded to students who used the exemplar. Furthermore, Scoles et al. (2012) and Wimshurst and Manning (2012) cited many participants who used exemplars achieved a higher mark; however, this increase was not represented across all assessment tasks, only those where the exemplar was provided, thereby questioning the transferability of skill to other assessment tasks and subjects (Wimshurst and Manning, 2012).

Traditional approaches of assessment feedback remain limited in effectiveness for a variety of reasons; students do not read feedback and if they do, they do not know how to optimise its use (Price et al., 2010). Furthermore, students also may misconstrue feedback, particularly when insufficient explanation for the feedback was provided, or misconstrued the intended feedback (Nicol, 2010). This review underscores the usefulness of exemplars as a tool to enhance students' understanding of assessment requirements through the provision of concrete examples and elaboration of marking guides (Hendry and Anderson, 2013).

#### 4.1. Implications and Recommendations for Nursing Education

This review demonstrates that despite the limited evidence around the use of exemplars in higher education in general and nursing education specifically, students' value exemplars and using exemplars can positively impact upon academic performance. As such it highlights a gap in our understanding of the potential for exemplars to be used to support improved assessment outcomes.

#### 4.2. Limitations

This review used a systematic search strategy developed in conjunction with a University Librarian. However the lack of consistent terminology in the topic area hampered the search process. It is unclear why all papers emanate from the UK and Australia, this geographical constraint may impact on the generalisability of findings. The variation between papers in terms of the course disciplines, level of study and types of assessment items makes comparison difficult. The absence of nursing education research in the area means that consideration needs to be given to the transferability of findings from other disciplines into nursing education. Additionally, the convenience sampling, various methods of measuring the impact of the intervention and use of non-validated data collection tools impacts on the validity of findings.

### 5. Conclusion

This integrative review critically appraises the available literature of the use of exemplars in higher education. Despite the paucity of available research to provide evidence of the effectiveness of and students' engagement with exemplars, this integrative review has identified that exemplars are potentially an important tool for scaffolding student learning. Additionally, the review highlights the value placed on exemplars by students as they give students confidence to write better answers and clarify marker expectations. Whilst students value exemplars, success measured by improvement in grade awarded was mixed. It is unclear if this is because the intervention was not effective or because it was not implemented effectively. Therefore, further research is required to determine the impact of using exemplars as a feedback strategy to support nursing students' academic writing in higher education.

### Conflict of Interest

No conflict of interest has been declared by the authors.

### References

- Agius, N.M., Wilkinson, A., 2014. Students' and teachers' views of written feedback at undergraduate level: a literature review. *Nurse Educ. Today* 34 (4), 552–559.
- Bell, A., Mladenovic, R., Price, M., 2013. Students' perceptions of the usefulness of marking guides, grade descriptors and annotated exemplars. *Assess. Eval. High. Educ.* 38 (7), 769–788.
- Bird, F.L., Yucel, R., 2013. Improving marking reliability of scientific writing with the developing understanding of assessment for learning programme. *Assess. Eval. High. Educ.* 38 (5), 536–553.
- Braun, V., Clarke, V., 2006. Using thematic analysis in psychology. *Qual. Res. Psychol.* 3 (2), 77–101.
- Bruno, I., Santos, L., 2010. Written comments as a form of feedback. *Stud. Educ. Eval.* 36 (3), 111–120.
- Carless, D., 2006. Differing perceptions in the feedback process. *Stud. High. Educ.* 31 (2), 219–233.
- CASP, 2006. Critical Appraisal Skills Programme (CASP). (Qualitative Research).
- Cathcart, A., Greer, D., Neale, L., 2013. Learner-focused evaluation cycles: facilitating learning using feedforward, concurrent and feedback evaluation. *Assess. Eval. High. Educ.* 1–13. <http://dx.doi.org/10.1080/02602938.2013.870969>.
- Cox, M., Irby, D.M., Epstein, R.M., 2007. Assessment in medical education. *N. Engl. J. Med.* 356 (4), 387–396.
- Crisp, G.T., 2012. Integrative assessment: reframing assessment practice for current and future learning. *Assess. Eval. High. Educ.* 37 (1), 33–43.
- Duncan, N., 2007. 'Feed-forward': improving students' use of tutors' comments. *Assess. Eval. High. Educ.* 32 (3), 271–283.
- Fluckiger, J., Vigil, Y.T.Y., Pasco, R., Danielson, K., 2010. Formative feedback: involving students as partners in assessment to enhance learning. *Coll. Teach.* 58 (4), 136–140.
- Handley, K., Williams, L., 2011. From copying to learning: using exemplars to engage students with assessment criteria and feedback. *Assess. Eval. High. Educ.* 36 (1), 95–108.
- Hendry, G.D., Anderson, J., 2013. Helping students understand the standards of work expected in an essay: using exemplars in mathematics pre-service education classes. *Assess. Eval. High. Educ.* 38 (6), 754–768.
- Hendry, G.D., Jukic, K., 2014. Learning about the quality of work that teachers expect: students' perceptions of exemplar marking versus teacher explanation. *J. Univ. Teach. Learn. Pract.* 11 (2), 5.
- Hendry, G.D., Armstrong, S., Bromberger, N., 2012. Implementing standards-based assessment effectively: incorporating discussion of exemplars into classroom teaching. *Assess. Eval. High. Educ.* 37 (2), 149–161.
- Hendry, G.D., White, P., Herbert, C., 2016. Providing exemplar-based 'feedforward' before an assessment: the role of teacher explanation. *Act. Learn. High. Educ.* 17 (2), 99–109.
- Hernández, R., 2012. Does continuous assessment in higher education support student learning? *High. Educ.* 64 (4), 489–502.
- Hounsell, D., McCune, V., Hounsell, J., Litjens, J., 2008. The quality of guidance and feedback to students. *High. Educ. Res. Dev.* 27 (1), 55–67.
- Hwang, G.-J., Chang, H.-F., 2011. A formative assessment-based mobile learning approach to improving the learning attitudes and achievements of students. *Comput. Educ.* 56 (4), 1023–1031.
- Li, J., De Luca, R., 2014. Review of assessment feedback. *Stud. High. Educ.* 39 (2), 378–393. <http://dx.doi.org/10.1080/03075079.2012.709494>.
- Newlyn, D., Spencer, L., 2010. Improving student performance in interdisciplinary law unit assessment by providing annotated exemplars. *J. Aust. Law Teach. Assoc.* 3 (1), 67–75.
- Nicol, D., 2010. From monologue to dialogue: improving written feedback processes in mass higher education. *Assess. Eval. High. Educ.* 35 (5), 501–517.
- Price, M., Handley, K., Millar, J., O'Donovan, B., 2010. Feedback: all that effort, but what is the effect? *Assess. Eval. High. Educ.* 35 (3), 277–289.
- Quinton, S., Smallbone, T., 2010. Feeding forward: using feedback to promote student reflection and learning—a teaching model. *Innov. Educ. Teach. Int.* 47 (1), 125–135.
- Rae, A.M., Cochrane, D.K., 2008. Listening to students how to make written assessment feedback useful. *Act. Learn. High. Educ.* 9 (3), 217–230.
- Robson, S., Leat, D., Wall, K., Lofthouse, R., 2012. Feedback or feed forward? Supporting Master's students through effective assessment to enhance future learning. In: *Cross Cultural Teaching and Learning for Home and International Students: Internationalisation of Pedagogy and Curriculum in Higher Education*.
- Sadler, D.R., 2010. Beyond feedback: developing student capability in complex appraisal. *Assess. Eval. High. Educ.* 35 (5), 535–550.
- Scoles, J., Huxham, M., McArthur, J., 2012. No longer exempt from good practice: using exemplars to close the feedback gap for exams. *Assess. Eval. High. Educ.* 38 (6), 631–645. <http://dx.doi.org/10.1080/02602938.2012.674485>.
- To, J., Carless, D., 2015. Making productive use of exemplars: peer discussion and teacher guidance for positive transfer of strategies. *J. Furth. High. Educ.* 40, 746–764. <http://dx.doi.org/10.1080/0309877X.2015.1014317>.
- Vardi, I., 2013. Effectively feeding forward from one written assessment task to the next. *Assess. Eval. High. Educ.* 38 (5), 599–610.
- Whitmore, R., Knaf, K., 2005. The integrative review: updated methodology. *J. Adv. Nurs.* 52 (5), 546–553.
- William, D., 2011. What is assessment for learning? *Stud. Educ. Eval.* 37 (1), 3–14.
- Wimshurst, K., Manning, M., 2012. Feed-forward assessment, exemplars and peer marking: evidence of efficacy. *Assess. Eval. High. Educ.* 38 (4), 451–465. <http://dx.doi.org/10.1080/02602938.2011.646236>.
- Yorke, M., 2003. Formative assessment in higher education: moves towards theory and the enhancement of pedagogic practice. *High. Educ.* 45 (4), 477–501.
- Yucel, R., Bird, F.L., Young, J., Blanksby, T., 2014. The road to self-assessment: exemplar marking before peer review develops first-year students' capacity to judge the quality of a scientific report. *Assess. Eval. High. Educ.* 39 (8), 971–986.

## **Appendix B. HREC Approval**



Locked Bag 1797  
Penrith NSW 2751 Australia  
Office of Research Services

ORS Reference: H10803



## HUMAN RESEARCH ETHICS COMMITTEE

24 November 2014

Doctor Nathan Wilson  
School of Nursing and Midwifery

Dear Nathan,

I wish to formally advise you that the Human Research Ethics Committee has approved your research proposal H10803 "Feed-forward: Using Annotated Exemplars to Promote Student Engagement and Satisfaction (FASTEN) Project", until 31 December 2015 with the provision of a progress report annually if over 12 months and a final report on completion.

### Conditions of Approval

1. A progress report will be due annually on the anniversary of the approval date.
2. A final report will be due at the expiration of the approval period.
3. Any amendments to the project must be approved by the Human Research Ethics Committee prior to being implemented. Amendments must be requested using the HREC Amendment Request Form:  
[http://www.uws.edu.au/data/assets/pdf\\_file/0018/491130/HREC\\_Amendment\\_Request\\_Form.pdf](http://www.uws.edu.au/data/assets/pdf_file/0018/491130/HREC_Amendment_Request_Form.pdf)
4. Any serious or unexpected adverse events on participants must be reported to the Human Ethics Committee via the Human Ethics Officer as a matter of priority.
5. Any unforeseen events that might affect continued ethical acceptability of the project should also be reported to the Committee as a matter of priority
6. Consent forms are to be retained within the archives of the School or Research Institute and made available to the Committee upon request.

Please quote the registration number and title as indicated above in the subject line on all future correspondence related to this project. All correspondence should be sent to the email address [humanethics@uws.edu.au](mailto:humanethics@uws.edu.au).

This protocol covers the following researchers:

**Nathan Wilson, Rebekah Carter, Paul Glew, Yenna Salamonson, Erika Matruglio**

Yours sincerely

Professor Elizabeth Deane  
Presiding Member,  
Human Researcher Ethics Committee

Locked Bag 1797  
Penrith NSW 2751 Australia  
Office of Research Services

ORS Reference: H10803



## HUMAN RESEARCH ETHICS COMMITTEE

21 October 2015

Doctor Nathan Wilson  
School of Nursing and Midwifery

Dear Nathan,

### **RE: Amendment Request to H10803**

The Office of Research Services has received a request to amend your approved research protocol H10803 "Feed-forward: Using Annotated Exemplars to Promote Student Engagement and Satisfaction (FASTEN) Project".

The amendment has been reviewed and I am pleased to advise that it has been approved, as follows:

Addition of Professor Elizabeth Halcomb and Dr Lucie Ramjan to the research team

Please do not hesitate to contact the Human Ethics Officer at [humanethics@uws.edu.au](mailto:humanethics@uws.edu.au), if you require any further information.

Regards

Professor Elizabeth Deane

Presiding Member,  
Human Researcher Ethics Committee

NON---STANDARD APPROVAL

In reply please quote: NSA15/14

27 October 2015

Professor Elizabeth Halcomb  
School of Nursing  
University of Wollongong NSW 2522

Dear Professor Halcomb

Thank you for forwarding the documentation of the University of Western Sydney HREC approval of ethics application detailed below to the Research Ethics Unit. The approval of the project has been noted.

**UOW Reference Number:** NSA15/14  
**Approving HREC Reference:** H10803  
**Title:** Feed---forward: Using Annotated Exemplars to Promote Student Engagement and Satisfaction (FASTEN) Project  
**Principal Researcher:** Doctor Nathan Wilson  
**UOW Researchers:** Professor Elizabeth Halcomb, Ms Rebekah Carter  
**UOW NSA Approval Date:** 27 October 2015

As this project will be monitored by the University of Western Sydney HREC no additional monitoring will be undertaken by a University of Wollongong HREC. However, the University of Wollongong has institutional responsibilities for the research which are separate from the ethical review. The University's Ethics Unit must be informed of complaints about the project and provided with reports of serious or unexpected adverse effects on participants.

Sincerely

Eve Steinke  
**Manager, Research Ethics**

cc: Doctor Nathan Wilson  
ccc: WSU HREC

## **Appendix C. Annotated Exemplar**

## **HEALTH VARIATIONS 2 – ESSAY ANNOTATED EXEMPLAR**

This annotated exemplar will assist you in your first assessment task for 401014 Health Variations 2, Case history review essay. The aim of this assessment is to enable you to identify, critically examine and report on the effective nursing management of chronic illness in people with a functional disability across the lifespan. It will prepare you for professional practice when working with people with a disability and chronic illness.

This exemplar will demonstrate the structure and language of the essay for you so that you know how to write your own. While the structure of the exemplar is the same, the CONTENT of the exemplar is different to the essay you will have to write.

The response in the annotated exemplar is based on the following case. Note that your own response will be based on the case of an adult with Down syndrome with a moderate intellectual disability and with either type 1 or type 2 diabetes, not an individual with CHF and moderate to severe cognitive impairment.

### Exemplar Case History:

You are on clinical placement at your local community health centre and are working with the Heart Failure CNC (Clinical Nurse consultant) for this shift. The Heart Failure CNC tells you that you are going to see John Davies is a 56 year old man who resides in a disability-specific group home. John suffered an anterior myocardial infarction and now has chronic heart failure. John's recovery following his myocardial infarction was complicated by a cardiac arrest where he had a 'down time' of 16 minutes and sustained a hypoxic brain injury. This has left John with a moderate to severe cognitive impairment. The Heart Failure CNC has been asked to review John because he has had multiple presentations to ED with exacerbation of his heart failure over the past six months.

The task details are as follows:

1. Review the literature and write a **1500 word essay** based on a case study that answers the following question: **"Critically analyse the health effects of having a heart failure and cognitive impairment and the impact of the nurses' ability to promote the health and wellbeing of the person"**.
2. Students are to focus their case study on an **adult** with **heart failure** and **cognitive impairment**.
3. Students must write an essay that consists of an introduction, a body and a conclusion plus a reference list in APA 6th Edn. style with a **minimum of 6 peer reviewed academic** references. Reference list is NOT included in the word count – your in text citations are included in the word count.
4. If you exceed the word limit by 10% the marker will stop marking once they reach 1650 words – no marks will be awarded for content after the word limit is reached.

The following annotated exemplar is broken up into introduction, body and conclusion sections to facilitate the explanation of how to structure each section. When you write your own essay, do not break it up into sections.

## Chronicity and Disability: heart failure and cognitive impairment

### Introduction

Good introductions provide a big picture context for what you are writing about and often start with a general statement about the broader area of study (i.e. chronicity and / or disability). Your 'thesis statement' outlines the position you will take or the argument you will develop in the essay. A good introduction should also provide the reader with a 'preview' of what your assignment sets out to do (the question/task). An outline of how you have gone about answering the question (the structure and content of your essay) is helpful in guiding your reader through the body of your essay.

Structure	Text	Notes
General statement	Chronic heart failure (CHF) is a debilitating illness affecting many people throughout the world. The primary aim of treatment for people with CHF is management of symptoms (Heart Foundation, 2013). However, self-managing these symptoms is particularly challenging for people with a cognitive impairment. This essay will consider the health challenges and their potential impacts on John when trying to manage his heart failure symptoms while simultaneously trying to adjust to life with a cognitive impairment. Using the ICF Model, it will discuss how John's activity and participation are affected by living with dual challenges - a disability and a chronic illness. Lastly, it will identify a strategy for managing heart failure symptoms and how this strategy will be adapted to ensure John's optimal health and wellbeing.	If you are going to use an abbreviation in an essay, you need to introduce it to the reader by writing it out in full the first time it is used and then including the abbreviation in brackets after the word.
Thesis statement		
'Preview' / outline		

## Body

The body of the essay should expand and develop the argument about chronicity and disability set out in the introduction. Each paragraph in the body will set out ideas and evidence that supports the overall argument and task. Each paragraph needs to begin with a strong TOPIC sentence that advances the main point being made and how it relates to the task. This point is then discussed more fully through elaboration and exemplification.

The assessment criterion also should assist you in the structuring of the body of your essay. You are required to do the following:

1. Critically analyse the health challenges that may arise across this man's lifespan as a result of his Down syndrome, moderate intellectual disability and Type 1 or Type 2 diabetes. Interpret how these health challenges may impact on his health and wellbeing. (10 marks)
2. Using the ICF Model, discuss how the man's activity and participation are potentially affected across his lifespan. (10 marks)
3. Identify x1 intervention/strategy for managing diabetes from the peer reviewed literature (journals only). How will you as the community nurse adapt this strategy/intervention to ensure optimal health and wellbeing across the man's lifespan? If you selected Type 1 diabetes – your intervention/strategy must focus on BSL and medication management. If you selected Type 2 diabetes your intervention/strategy must focus on physical activity and diet. (20 marks)

Below is an exemplification of how you could address each of 1-3 above in an essay. Each one of these criteria will require several paragraphs in the body of your essay. (Remember that you will not split your own response up into sections with headings like this. The exemplar has been prepared in this way to make the structure and content clearer for you).



**Criterion 1: Discuss the added health challenges that an adult with a moderate intellectual disability and diabetes faces across their lifespan and the potential impact these challenges may have on their health and wellbeing. (10 marks)**

Structure	Text	Notes
<p>Topic sentence – introduces the point of the paragraph</p> <p>Elaboration and evidence – provides more information on the topic and evidence to support claims</p> <p>Topic sentence</p> <p>Elaboration</p>	<p>The National Heart Foundation (2011) has defined CHF as a debilitating illness that affects almost 2% of Australian people. In 2011 it was estimated that heart failure was the underlying or associated cause of 13% of all deaths (Heart Foundation, 2013). In addition, there has been a 20% increase in hospital admissions for CHF since 1999 -2000, indicating that it is a growing and significant problem for the health sector. Coronary artery disease is a leading cause of CHF which is characterised by impaired pumping action of the left ventricle (Vogels et al., 2007). This impaired function means that the left ventricle is not able to fill or eject blood as normal and results in symptoms such as fatigue and dyspnoea (Heart Foundation, 2011). In essence, CHF is a chronic health issue which has to be managed for the rest of the patient's life.</p> <p>John has not one but two chronic health issues; CHF and his cognitive impairment resulting from sixteen minutes downtime during his cardiac arrest. A cognitive impairment is defined by Dickson, Tkacs and Reigel (2007) as having difficulty concentrating, remembering, learning new</p>	<p>Body paragraphs generally follow a three-move structure. 1. A point is introduced in the topic sentence. 2. The point is expanded on, 'fleshed out' and explained in an elaboration. 3. The point is exemplified or linked to evidence.</p> <p>Note that definitions and /or explanations of particular concepts / terms should come close to the beginning of the essay if at all possible.</p> <p>Also note that not every single paragraph ALWAYS needs a separate exemplification move. This first paragraph merges elaboration with exemplification/evidence.</p>

<p>Exemplification – gives examples</p> <p>Topic sentences</p> <p>Elaboration</p> <p>Exemplification</p>	<p>things, and/or making decisions; factors that directly affect a person's functional skills and participation in activities of daily living. Moderate to severe cognitive impairment results in the person having acquired disability that is further compounded by CHF. That is, the reduced cardiac output further reduces cerebral blood flow resulting in more negative cognitive symptoms for the person. These two interlinked factors make management of the chronic condition all the more challenging with the likelihood of a greater risk of poorer health outcomes.</p> <p>The research literature clearly reports better health outcomes when CHF is managed in the community through education advocating for and enhancing self-care behaviours. However, this is less likely to be successful where a person has a cognitive impairment (McLennan et al., 2007). Not only will the person be trying to readjust to their new life living with a disability, but also coming to terms with learning new skills and routines to manage their chronic illness. This dual problem negatively impacts expected health outcomes where the impact of the disability may be easily missed in the acute care setting (McLennan et al., 2007).</p>	<p>The underlined statement draws the issue back to the challenge of managing chronicity and disability. In other words, it maintains the focus on the topic of the essay.</p> <p>Note that most of the references in this exemplar are examples of information-prominent referencing – that is a claim is made in the writer's own words and then a reference is provided. This leads to a more fluent style than consistent author-prominent referencing.</p>
--	--	---

Topic sentence	There are many challenges that lead to these poorer outcomes which can be directly linked with cognitive impairment. These include non-adherence to recommended therapy, medication mismanagement, failure to recognise early symptoms and seek timely medical attention (Heckman et al., 2007). The critical point that needs to be understood by nurses is that a cognitive impairment disables the person as they can become unable to master the complex tasks involved in the self-management of their CHF. That is, compliance with dietary restrictions, prescribed medications, monitoring of fluid balance and weights, and taking appropriate and timely action when symptoms of decompensated CHF develop becomes challenging (Heckman et al., 2007; Silas, 2007). Without a targeted strategy to support the person's habilitation at home, their active participation in meaningful and health-affirming activities will be limited.	Note that topic sentences are generalised and abstract. These generalisations and abstractions are 'unpacked' in elaboration and exemplification stages. For example, the 'many challenges' noted in the topic sentence are listed in the elaboration.
Elaboration		
Exemplification		

**Criterion 2: Using the ICF Model, discuss how the adult's activity and participation across the lifespan are potentially affected by having intellectual disability and diabetes. (10 marks)**

Structure	Text	Notes
Topic sentence	The ICF is an international framework based on the principles of primary health where the person's environment and participation in activities is considered central to their health and wellbeing (WHO, 2002). The ICF is designed to enable the measurement and impact of the interaction of both health and disability in a person. Central to this interaction are three core domains that enable practitioners to appreciate the extent of a person's disability: (1) functional impairment, (2) activity limitation and (3) participation restrictions. John now has altered heart and cognitive function impairing his physical, intellectual and emotional capacity. This creates activity limitations for John as he is no longer able to perform to his pre-impaired state. In turn, John is now less likely to participate in a range of social, work and domestic tasks. The combination of these three factors illustrates how John has become disabled by his chronic illness and impairment.	<p>The topic sentence is often the place where new concepts are introduced and defined.</p> <p>Note that formal, technical and nominalised<sup>1</sup> language are used throughout this response.</p> <p>Some illustrative examples are boxed for you on this page.</p>
Elaboration		
Exemplification		

<sup>1</sup> Nominalisation is when a process or description is presented as a thing (in other words, when something usually expressed as a verb or an adjective is expressed as a noun – e.g. talking about someone's *participation* instead of the verb *participate*). It is important in academic writing.

<p>Elaboration</p>	<p>John's living environment since the onset of his cognitive impairment is a disability-specific group home whose philosophies are based on the principles of the UN Convention for the Rights of Persons with Disabilities (WHO, 2011). That is, a promotion of the rights of the person to live an independent life with the required amount of support to attain participation in all life domains. The dilemma facing John and his caregivers in such an environment, is balancing the need to promote participation, but with the acknowledgement of his activity limitations now that he is living with a disability and a chronic illness. This impacts activities like going shopping for groceries, picking up medications from the pharmacy, participating in paid work, joining in community groups, and getting involved in household tasks such as cooking. John's ability to manage these tasks will be impacted by the effects of his cognitive impairment such as difficulties with disorganised thinking, formulating and achieving goals and problem solving (Heckman et al., 2007). These effects coupled with the symptoms of CHF mean that John's activity potential is severely limited meaning his participation in activities that will directly and indirectly benefit his own health and wellbeing is constrained. The most effective way to enhance John's participation and to decrease his activity limitations are effective</p>	<p>This paragraph begins with some general information to contextualise the topic sentence. In a sense, some of the elaboration is given before the topic sentence. It is important not to do this too often, however it is effective in this instance. The paragraph could also be re-phrased to begin with a sentence like "As he is living in a group home promoting independent living, John and his carers face the dilemma of balancing participation and support". The writer could then go into more detail about the group home, etc.</p>
<p>Topic sentence</p>		
<p>Exemplification</p>		
<p>Elaboration</p>		
<p>Exemplification</p>		
<p>Elaboration</p>		<p>Note also in this paragraph the waves of elaboration and exemplification as the writer elaborates on the difficulties faced by the patient in his daily life and illustrates with specific examples and evidence from the literature.</p>

Topic sentence	self-management of his CHF symptoms.  People with CHF often have a decreased cardiac output and in order to maintain homeostasis, the body attempts to compensate by increasing blood volume (Albert, 2012) and the retention of sodium by the kidneys (Marieb & Hoehn, 2010). One primary aim of managing CHF symptoms is to control water balance in the vascular system by restricting a person's sodium intake. Sodium is an essential electrolyte found in the body that is essential for normal cell function (Marieb & Hoehn, 2010). The concern for John is not that he has been prescribed a low salt diet, it is the fact that he may not adhere to this recommendation which will compound both his chronic illness and his impairment thus exacerbating his disability.	In this paragraph the change from elaboration to exemplification is visible as a shift from generalised discussion of issues to do with managing water balance in patients with CHF (elaboration) to the discussion of the actual specific case of John (exemplification).
Elaboration		
Exemplification		

**Criterion 3: Identify x1 intervention/strategy for managing diabetes from the peer reviewed literature (journals only) and discuss how the nurse will need to adapt this strategy/intervention to ensure optimal health and wellbeing across the adult's lifespan. If you selected Type 1 diabetes – your intervention/strategy must focus on BSL and medication management. If you selected Type 2 diabetes your intervention/strategy must focus on physical activity and diet. (20 marks)**

Structure	Text	Notes
Topic sentence	There are a number of strategies which could be employed to assist John to adhere to a low salt diet.	<p>Note that it is important to support the claims you make with <u>reference to evidence</u>.</p> <p>Referencing others adds the authority of respected scholars in the field to your argument. You also need to remember that this is also an ASSESSMENT task, and part of the requirement is to demonstrate that you have engaged with the literature in a meaningful way and read widely on your topic.</p>
Elaboration	possible implications of non-adherence to a low salt diet. [Welsh et al., (2010)] suggests that cognitive impairment varies from person to person. Health care professionals should be mindful that educational programs are tailored to the individual needs, as it is unlikely that one particular education program will be successful. One aspect of education would be to involve John's caregivers [Heckman et al., 2007]. Furthermore, the nurse must ensure the caregiver is well informed because John's self-management will be dependent upon his caregiver's perception and knowledge of CHF [Cardol, Rijken and Van Schrojenstein Lantman-de Valk, 2012].	
Exemplification		
Topic Sentence	John is central to the success of any program and so he must also be included. Cardol, Rijken and Van Schrojenstein Lantman-de Valk	



<p>Elaboration</p> <p>Exemplification</p> <p>Topic Sentence</p>	<p>(2012 ) recommend involving John because they assert only people who are well informed are best placed to participate in self-care activities. Primeau and Frith (2013) recommend using simplified language to an appropriate level; tools such as visual aids can assist this process. For example, creating a diet plan that includes a diagram of the heart, pictures of salt shakers, foods with high sodium content, swollen extremities and a picture of an ambulance, doctor and/or hospital may re-enforce the link between high sodium intake and CHF symptoms (Welsh et al., 2010). Primeau and Frith (2013) also suggest nurses should allow additional time for appointments, slow down their teaching and expect necessary repetitions of the same points to reinforce information at each visit. These strategies are particularly important for John as his cognitive impairment will impact upon his ability to understand and retain this detail.</p> <p>Other strategies which could be implemented to assist John include maintaining a food diary, creating a menu plan using low sodium food choices, assisting with food choices when not at home and shopping strategies. Welsh et al (2010) suggest that creating and maintaining a</p>	<p>One important language strategy in an essay of this type is the use of modality , or language to indicate degrees of obligation and probability. It is often used in academic writing to moderate claims so that a case is not stated too strongly.</p>
---	--	--



<p>Elaboration</p>	<p>food diary will allow John and his caregivers to identify food preferences and create a menu plan which will be more sustainable. John's menu plan should include low sodium food choices; these can be identified by locating the sodium content on packaging (Primeau &amp; Frith, 2013). Eating out is often seen as a challenge for people requiring a modified diet. Southwest Healthcare (2013) advocate strategies such as reducing the frequency of eating out, selecting venues with healthier options and assisting and involving John when selecting food choices in an effort to minimise sodium intake. John's living arrangements and his ability to prepare and cook will impact upon his meal planning (Welsh et al., 2010). Promoting healthy food choices through such a strategy will lead to better health outcomes for John.</p>	
--------------------	--	--

## Conclusion

A conclusion sums up the demands of the task and re-emphasises the main argument developed through the body of the essay. However brief, a strong conclusion will strengthen your work.

Restate briefly the significance of the issue (chronicity and disability and their interactions) for nursing practice and how your intervention / strategy would result in positive outcomes. Sum up the big picture context from your introduction.

Structure	Text	Notes
Restatement of thesis.  Summary of issues dealt with in the body of the essay	In conclusion, it is clear that understanding the interaction between chronic illness and disability is critical for nurses in order to inform their practice. That is, the nurse cannot simply focus on the chronic condition, but needs to appreciate the relationship between the functional impairment, activity limitations and participation restrictions. Using the case study of John's prescribed low-salt diet, this essay has illustrated how a deeper understanding of these factors can inform the nurses' practise through the adaptation of strategies that will have a better chance of being effective.	Note how the essay finishes with a strong statement of relevance to nursing practice.

## References

You should include a reference list here in APA 6th Edn style with a minimum of 6 peer reviewed academic references. The references for this exemplar are not included here as it is part of your task to find your own literature to support your own topic. If you are unsure of how to format a reference list, the library has very good material here:

[http://library.uws.edu.au/uws\\_library/sites/default/files/cite\\_APA.pdf](http://library.uws.edu.au/uws_library/sites/default/files/cite_APA.pdf)

## **Appendix D. Paper 2**



Contents lists available at ScienceDirect

Nurse Education Today

journal homepage: [www.elsevier.com/locate/nedt](http://www.elsevier.com/locate/nedt)

## Does the use of annotated exemplars by nursing students predict academic performance? A cohort study

Rebekah Carter<sup>a,\*</sup>, Elizabeth Halcomb<sup>b</sup>, Lucie M. Ramjan<sup>a,c</sup>, Nathan J. Wilson<sup>a,c</sup>, Paul Glew<sup>a,c</sup>, Yenna Salamonson<sup>a,c</sup>

<sup>a</sup> University of Western Sydney, School of Nursing and Midwifery, Locked Bag 1797, Penrith, NSW 2751, Australia

<sup>b</sup> School of Nursing, Faculty of Science, Medicine & Health, University of Wollongong, NSW 2522, Australia

<sup>c</sup> Centre for Applied Nursing Research (CANR), Ingham Institute for Applied Medical Research, Australia

### ABSTRACT

**Aims:** To examine the usefulness of the annotated exemplar as an academic support strategy, and explore the characteristics of students who were more likely to engage with this academic support tool. Additionally, to identify if there was any influence on the academic performance in the assessment activity among those who engaged with the annotated exemplar.

**Background:** Annotated exemplars have the potential to target students *en masse* and provide meaningful, task specific comments that guide students prior to assessment submission. Effective strategies to support student learning are needed as nursing students are increasingly entering tertiary studies from non-traditional backgrounds.

**Design:** A cohort study was used to collect administrative data, academic grades and annotated exemplar usage statistics.

**Setting:** A large multi-campus university in NSW, Australia during Spring semester 2016.

**Participants:** Second year undergraduate students enrolled in a single unit in the Bachelor of Nursing Program.

**Methods:** Quantitative data related to marks, grades and usage information; and demographic data and contact details were extracted from the online learning management system and student electronic records.

**Results:** Of the 1120 students enrolled in the unit, 49.5% of students engaged with the annotated exemplar. Students more likely to engage with the tool were older, female, born outside of Australia and had higher hit rates on the online learning management site. Of those who engaged with the annotated exemplar, there was no demonstrated increase in assessment mark.

**Conclusion:** To improve student performance it is essential that feedback is engaging and effective. While, in this study, use of the annotated exemplar was not reflected in student marks, it is unclear how students may have performed without access to the exemplar. Further research is required to explore the reasons why students did not engage with the annotated exemplar and, for those who did, why the intervention did not impact on assessment mark.

### 1. Introduction

Feedback is a critical component to improve student learning (Crimmins et al., 2016) and is viewed by some as an essential indicator of teaching effectiveness (Wygall et al., 2014; Zhang and Zheng, 2018). Nevertheless, assessment feedback has consistently received criticism from students in higher education (Agius and Wilkinson, 2014). In addition to the poor quality of assessment feedback (Hendry et al., 2016; Pitt and Norton, 2017; Scoles et al., 2012), other reasons students provide for their low ratings include timeliness of feedback (Li and De Luca, 2014) and paucity of suggestions for improvement (feed-forward) that can be applied to subsequent assessments (Vardi, 2013). Not surprisingly, students often undervalue the written comments provided by the assessors, instead only focusing on the marks received (Robinson

et al., 2013).

For feedback to effectively promote learning, it is vital that students engage and act on comments and suggestions provided by assessors (Boud and Molloy, 2013). This will not only improve the quality of future assessment tasks but also develop their professional practice following graduation (McKevitt, 2015; Pitt and Norton, 2017; Sadler, 2010). In the era of cost containment and budgetary constraints in higher education, academics are often restricted by a lack of time to provide individualised, targeted assessment feedback (Carless et al., 2011; Robson et al., 2012). Furthermore, higher education is increasingly reliant on sessional staff who are often less experienced in providing quality, constructive and consistent written assessment feedback (Andrew et al., 2010; Grainger et al., 2016; Peters et al., 2011). One approach to address this is to design a ‘front-end’ support strategy that

\* Corresponding author.

E-mail addresses: [rebekah.carter@westernsydney.edu.au](mailto:rebekah.carter@westernsydney.edu.au) (R. Carter), [ehalcomb@uow.edu.au](mailto:ehalcomb@uow.edu.au) (E. Halcomb), [l.ramjan@westernsydney.edu.au](mailto:l.ramjan@westernsydney.edu.au) (L.M. Ramjan), [n.wilson@westernsydney.edu.au](mailto:n.wilson@westernsydney.edu.au) (N.J. Wilson), [p.glew@westernsydney.edu.au](mailto:p.glew@westernsydney.edu.au) (P. Glew), [y.salamonson@westernsydney.edu.au](mailto:y.salamonson@westernsydney.edu.au) (Y. Salamonson).

<https://doi.org/10.1016/j.nedt.2019.06.003>

Received 21 March 2019; Received in revised form 14 May 2019; Accepted 9 June 2019  
0260-6917/ © 2019 Published by Elsevier Ltd.

would meet the needs of students (Scoles et al., 2012).

## 2. Background

Annotated exemplars are tools that have the potential to provide students with quality feedback, increase student engagement and promote student learning (To and Carless, 2015; Wygal et al., 2014; Yucel et al., 2014). Handley and Williams (2011) define exemplars as previous assignments or examples of the completed assessment task that are annotated with feedback. Annotating exemplars with comments allows students to make sense of the exemplar and identify how these comments can be applied to correctly structure their own written assessment task using the mock example provided (Quinton and Smallbone, 2010). The intention is to guide students on how to use feedback received from one assessment and to transfer these skills to future assessment tasks (Hendry et al., 2016). Additionally, the student is prompted to construct the assessment task correctly the first time by applying learning derived from exemplars. This strategy has been labelled a 'feed-forward' approach (Scoles et al., 2012).

Annotated exemplars allow students to receive meaningful and task-specific comments related to the assessment task at hand. The provision of online exemplars facilitates access to this information by large cohorts of geographically dispersed students (Handley and Williams, 2011) at any time (Baker and Zuvela, 2013) and caters for student groups with different entry levels (Yucel et al., 2014). There are also benefits for academic staff and students, such as reduced workload (Smyth et al., 2012), scaffolding student learning (Carter et al., 2018) and improved student performance (Hendry and Jukic, 2014; Wimshurst and Manning, 2012; Yucel et al., 2014).

As the student population enrolled in higher education continues to diversify (Bradley, 2008), effective strategies to support learning will need to evolve and embrace this diversity (Devlin and Samarawickrema, 2010). Thus, feed-forward in addition to feedback processes need to be designed to engage diverse students and support their various learning needs. An annotated exemplar (AE) may have the potential to influence learning in this way as it is a feed-forward strategy with several benefits not limited to reducing misinterpretation and increasing understanding of assessment expectations. Students often have difficulty understanding and responding to assessment requirements (To and Carless, 2015) and exemplars provide an illustration of how to answer an assessment question. Model answers, such as exemplars, have proven to be effective in increasing marks in summative assessment (Hendry and Jukic, 2014; Li and De Luca, 2014; Newlyn and Spencer, 2010; Wimshurst and Manning, 2012).

Socio-demographic factors have been recognised to influence student engagement in higher education. Gender, age, country of birth and grade point average (GPA), have proven to be significant predictors of engagement and academic performance in several studies (Kenny et al., 2011; Rubin et al., 2018; Salamonsen et al., 2011; Zheng et al., 2014). Female students outperform male students in university courses in general (Conger and Long, 2010). The issues for older students are multi-factorial. Mature age students are more likely to have limited academic skills; be concerned about their lack of critical background knowledge (Buultjens and Robinson, 2011) and have limited information technology skills (Kenny et al., 2011). Students born in a country other than that which they are studying are more likely to underperform (Zheng et al., 2014). Lastly, students with a higher GPA are likely to be more engaged learners (Owston et al., 2013) and perform better than others for a variety of reasons including having better study skills, superior time management and being more motivated and committed learners (Sheard, 2009).

However, little is known as to whether there is a relationship between student characteristics and the utility of using AE's. This information is crucial to evaluate the effectiveness of this assessment support strategy and whether it meets the needs of 'the changing face' of student diversity in higher education. With increased emphasis on

blended and online learning approaches there is less face-to-face interaction between students and nursing academics. Therefore the need for a feed-forward approach is even more important for undergraduate nursing students (Croft et al., 2010; Sweeney et al., 2016). While AE's have been utilised across various disciplines in the undergraduate setting with some success (Hendry and Anderson, 2013; Hendry et al., 2012; Hendry et al., 2016; Wimshurst and Manning, 2012) and this strategy has been advocated for use in nursing (Carless, 2006), there is little evaluation of its use in nursing education to date (Carter et al., 2018).

The aim of this paper is to report the usefulness of AE's in a large, multi-campus cohort by: i) examining the relationship between uptake and engagement with an AE and student's socio-demographic profile and; ii) determining if use of the AE has a positive impact upon academic performance.

## 3. Methodology

### 3.1. Study design

This prospective follow-up study was the first phase of a sequential mixed methods study. Within this phase administrative data and grade information as well as use of the AE was collected. A second phase collected qualitative data from students and teaching staff about the experiences of using the approach. Due to the volume of data these qualitative data is reported separately (Authors own).

### 3.2. Population and setting

Participants were second year undergraduate students enrolled in a single subject in the Bachelor of Nursing Program at a large university in NSW, Australia during Spring semester 2016. This subject focused on disability and chronicity in health and wellbeing, with students exploring case scenarios across the lifespan related to disability (e.g. Down syndrome) and chronic illness (e.g. diabetes, epilepsy, asthma or thyroid dysfunction). The subject had approximately 1100 students enrolled across multiple campuses. Two summative assessments were required to complete the subject; one 1500 word essay and a final written examination. Each assessment was worth half of the total marks available for the subject. To achieve an overall pass grade for the subject a student had to achieve an aggregate mark of 50%.

### 3.3. Educational intervention

The AE was uploaded to the subject site on the online learning management system (LMS) by the Subject Coordinator. The AE was a full version of the assessment essay, addressing the same essay question. However, while the assessment task required students to write an essay response about a man with Down Syndrome and diabetes, the AE was related to chronic heart failure in a man with an acquired brain injury. The exemplar was written by two academic staff, modelling the expected structure and content for the essay, before being annotated with comments by a linguistics expert.

Students were alerted three times by email and via the LMS that the resource was available. Learning activities using the AE were embedded within tutorial classes. These learning activities required students to access the AE, explained how it could be used, provided practice using the exemplar to write an essay paragraph and afforded the opportunity for tutors to respond to student enquiries. Once students had engaged with the AE they were requested to undertake a 10 item multiple choice quiz about the accessibility and ease of use of the AE. These quiz results were used to record student engagement with the AE.

### 3.4. Data collection

Quantitative data including demographic information such as

1. Student progress rates in units and courses
2. Unit grade distributions, for example:
  - collection of student work
  - assessment feedback
3. Demographic data gathered at enrolment, for example:
  - Language spoken at home, low socio-economic status,
  - First in family status, basis of admission (current school leaver; non-current school leaver categories such as TAFE articulation),
  - recognition of prior learning both in Australia and overseas and HSC performance in specific subjects.

Fig. 1. Institutional data.

student identification number, age, gender, country of birth and grade point average (GPA) were extracted from student records. Student marks, attempts at AE quiz and LMS usage information (hit rates on the online eLearning platform) were collected about students by downloading from the LMS site (Blackboard Learn 9.1 Q2 2018 CU1) (Fig. 1) (Blackboard.com, 2018). This information was extracted to identify the degree to which students engaged with the AE (attempted AE quiz); identify the characteristics of students who engaged with the AE (gender, age, GPA, previous study, overseas born) and to determine if there was an improvement in essay mark (mark > 54%).

### 3.5. Ethical considerations

Approval was granted by the Western Sydney University Human Research Ethics Committee prior to contacting the students or retrieving study data (Approval No. H10803). An opt-out approach was employed for participant recruitment. At the commencement of the semester, students were contacted via their student email account and informed of the study. They were advised that their participation was voluntary, and they could withdraw at any time. They were also provided a copy of the participant information sheet and an 'opt out' email link if they wished to withdraw from the study. Despite these interventions, no student opted out of this research. As all data were aggregated and no individual student was able to be identified within any data arising from the project.

### 3.6. Data analysis

Data were imported into the Statistical Package for the Social Sciences (SPSS) version 22 for analysis (IBM, 2013) and matched using the student number as a unique identifier. Data were then checked manually for accuracy and completeness before being analysed using a combination of descriptive and inferential statistics (Nagelkerke's  $R^2$  and Hosmer-Lemeshow goodness of fit test) (Menard, 2018).

To answer the research questions five dichotomous variables were entered and measured using a logistic regression model. These variables were: a) grade point average (7 point GPA) ( $\geq 4$  or  $< 4$ ); b) cumulative hits on the LMS ( $> 4$  h or  $< 4$  h); c) age ( $< 27$  years or  $\geq 27$  years); d) gender; and e) country of birth (Australian born or born outside Australia). The median was used as a measure for all variables except country of birth. Similarly, the essay mark was also dichotomised at the median score (up to 54% or  $> 54\%$ ). A median split has been found to be just as effective as a continuous variable and may be preferred as it may have a narrower margin (Iacobucci et al., 2015). Using country of birth as a split demonstrates the diversity of the cohort and is a suitable variable to measure as students born outside of Australia underperform academically compared to Australian born students (Salamonson et al., 2012).

Following variable recoding, a combination of descriptive and

inferential statistical analyses was then undertaken. Descriptive statistics (frequencies and percentages for categorical variables, and mean, median and interquartile range for continuous variables) were used to describe the demographic and academic characteristics. Logistic regression analyses were used to determine the demographic and academic predictors of: i) completion of the annotated exemplar quiz; and ii) high academic performance in the essay assessment. The results were presented as adjusted odds ratio with 95% confidence intervals (CI). Additionally, Nagelkerke's pseudo  $R^2$  was computed to explain the total logistic model variance, and Hosmer-Lemeshow test to assess the model's goodness-of-fit.

## 4. Results

Most of the 1120 enrolled students ( $n = 929$ ; 82.9%) were female and their median age was 28.5 years (IQR: 21.9–33.0; range: 19–63 years) (Table 1). Two thirds of students ( $n = 750$ ; 67.0%) were born outside Australia, with 51.1% ( $n = 572$ ) speaking a language other than English at home. Just under half of the students ( $n = 554$ ; 49.5%) attempted the AE quiz. The median for the cumulative duration of time spent on the LMS subject site was 4 h (IQR: 1.8–7.7; range: 0–47.95). The median GPA of students prior to this subject was 4 (IQR: 3.4–5.0; range 0–7). The median essay mark was 54% (IQR: 40.0–64.0; range 0%–96%).

**Table 1**  
Demographic and academic characteristics.

Variable	
Age, mean [median] (IQR) years (range: 19 to 63 years)	28.5 [27.0] (21.9–33.0)
Sex, $n$ (%)	
Male	191 (17.1)
Female	929 (82.9)
Country of birth, $n$ (%)	
Australia	370 (33.0)
Born outside Australia	750 (67.0)
Language spoken at home, $n$ (%)	
English only	548 (48.9)
Other than English	572 (51.1)
Enrolment category, $n$ (%)	
International student	322 (28.8)
Domestic student	798 (71.3)
Annotated exemplar quiz attempts, $n$ (%)	
Attempted quiz	554 (49.5)
Did not attempt quiz	566 (50.5)
Grade point average (GPA) at the beginning of current semester, mean [median] (IQR) (range: 0 to 7)	4.2 [4.0] (3.4–5.0)
Essay mark (/100), mean [median] (IQR) (range: 0 to 96)	51.6 [54.0] (40.0–64.0)
Course activity cumulative hits LMS, hours, mean [median] (IQR) (range: 0 to 47.9 h)	5.6 [4.0] (1.8–7.7)

**Table 2**  
Academic and demographic predictors of engagement in annotated exemplar.

Variables	Coefficient (B)	Standard error	Adjusted odds ratio (95% CI)	p value
High GPA ( $\geq 4$ )	−0.02	0.13	0.98 (0.76–1.28)	0.892
Cumulative hit on LMS ( $> 4$ h)	0.45	0.13	1.57 (1.22–2.03)	0.001*
Age median: $> 27$ years	0.62	0.13	1.87 (1.44–2.41)	$< 0.001$ *
Gender: female	0.67	0.17	1.96 (1.40–2.75)	$< 0.001$ *
Country of birth: overseas-born	1.04	0.14	2.81 (2.13–3.72)	$< 0.001$ *

\* denotes  $p$  value is  $< 0.05$

#### 4.1. Predictors of engagement with AE

Five variables were included in the logistic regression model to examine for predictors of engagement with the AE. The four significant predictors of high engagement were: i) those born outside Australia (OR: 2.81, 95% CI: 2.13–3.72); ii) female gender (OR: 1.96, 95% CI: 1.40 to 2.75); iii) those older than 27 years (OR: 1.87, 95% CI: 1.44 to 2.41); and iv) those with high ( $> 4$  h) cumulative hit rates on LMS (OR: 1.57, 95% CI: 1.22 to 2.03). The chi-square statistic of the Hosmer-Lemeshow goodness of fit test was 8.424, 8  $df$  ( $p = 0.393$ ) indicating adequate fit. The full logistic regression model is shown in Table 2.

#### 4.2. Predictors of a high essay mark

To examine differences in performance in the essay assessment, six variables were included in the logistic regression model. The three significant predictors of high ( $> 54\%$ ) essay mark were: i) high GPA (OR: 3.45 95% CI: 2.64 to 4.51); ii) cumulative hit rates on LMS (OR: 1.52, 95% CI: 1.17 to 1.97); and iii) being Australian-born (OR: 1.67, 95% CI: 1.26 to 2.21). Students' attempts of the AE exemplar quiz, gender and age did not emerge as a significant predictor of high essay mark. The Nagelkerke's  $R^2$  value was 0.150, the chi-square statistic of the Hosmer-Lemeshow goodness of fit test was 14.906, 8  $df$  ( $p = 0.061$ ) (Table 3).

### 5. Discussion

This study aimed to examine the effectiveness of AE as an academic feed-forward support strategy for nursing students. In addition, this study also sought to examine if specific student demographic groups were more likely to engage with the AE and investigate its impact upon academic performance. Only approximately half (49.5%) of the student cohort engaged with the exemplar, which was surprisingly low. Although reasons for a lack of engagement were not collected from students in this study, possible explanations could be a lack of student motivation which has previously been reported (Scoles et al., 2012). Furthermore, the impersonal nature of this online support and the lack of interactivity in the online AE resource could have also contributed to the lack of student engagement (Croft et al., 2010).

Although only slightly less than half of the student cohort engaged with the AE, those who used this learning tool were also more likely to engage with the subject online LMS, were older, female and born outside Australia. Predictably, higher subject online LMS engagement was

positively associated with AE quiz attempt, which was not unexpected as high online LMS engagement would increase the likelihood of students locating the exemplar and completing the AE quiz. Conversely, possible explanations as to why students did not engage with the AE could be due to the design in the LMS. Ability to navigate the LMS may have reduced the likelihood of students with limited computer literacy stumbling on the AE resource. Some students may have lacked motivation or the time required to engage with the AE in the LMS due to other competing priorities such as other subject of study and undertaking clinical placement (Tomas et al., 2015).

Compared to younger students, those who were older were more likely to use AE. Factors which could have contributed to this finding include a recognition of their personal learning needs as this group of students were more likely to be less confident with their academic abilities (Stone, 2008). For instance, many mature-age students are less confident with their study skills and have been reported to invest more study time in higher education (Kenny et al., 2011).

Female nursing students in this study were more likely to use AE, which was not unexpected as females have been identified to adapt more easily to the contemporary higher education's discourses (Sheard, 2009), and consequently are more likely to outperform their male counterpart (Severiens and Ten Dam, 2012; Wan Chik et al., 2012). Female students have also been reported to have the added advantage of having better non-cognitive skills, such as organisation, self-discipline, attentiveness, dependability and help-seeking behaviour (Conger and Long, 2010; Wan Chik et al., 2012). It has been suggested that women are also more motivated towards and readily engage with academic goals and activities (Sheard, 2009). The findings of this study support the idea that different support strategies may be required for male and female students. This study also showed that nursing students born outside of Australia were more likely to use and engage with the AE, which was perhaps a reflection of cultural norms, values, and beliefs of a sizeable proportion of those born overseas (Di Domenico et al., 2015).

It was anticipated that greater engagement with the AE would be related to an improvement in academic performance. However, the results of this study demonstrated that those who used the AE did not perform better than those who did not use the AE and may be attributed to the increased use of a blended and online learning approach. Other researchers report similar findings, Yucel et al. (2014) who found there was no demonstrated improvement in final mark and with Hendry and Anderson (2013) where students had a positive view of the exemplar, demonstrated no improvement in performance. In contrast, Newlyn and

**Table 3**  
Academic and demographic predictors of high ( $> 54\%$ ) essay mark.

Variables	Coefficient (B)	Standard error	Adjusted odds ratio (95% CI)	p value
Attempted AE Quiz: yes	0.05	0.14	1.05 (0.80–1.37)	0.727
High GPA ( $\geq 4$ )	1.24	0.13	3.45 (2.64–4.51)	$< 0.001$ *
Cumulative hit on LMS ( $> 4$ h)	0.42	0.13	1.52 (1.17–1.97)	0.002*
Age: $> 27$ years	0.06	0.14	1.06 (0.81–1.39)	0.665
Gender: female	0.30	0.17	1.34 (0.96–1.89)	0.090
Country of birth: locally-born	0.51	0.15	1.67 (1.26–2.21)	0.001*

\* denotes  $p$  value is  $< 0.05$



Spencer (2010) reported an improvement in the mean marks for all students exposed to exemplars compared to those who were not. Although this remains open to conjecture, possible reasons why that may have impacted upon essay performance were that the essay was due early in the semester (week 4) and the participants were preparing for a four week clinical placement and had little time to prepare.

Although engagement with the AE was not a predictor of high essay mark, a myriad of key factors were shown to contribute to essay performance, which included previous GPA and high engagement with the subject online LMS. Another consideration is that while there was no demonstrated improvement in marks, the study did not predict under-performance or identify students who did not receive adequate support. With the massification of higher education, identifying those students who do require support may be missed (Vardi, 2013). This study shows that feed-forward interventions, such as AE's, provide additional learning support by delivering detailed evidence of what is required before submission (Scoles et al., 2012). Further investigation is needed to explore innovative approaches for the delivery of AE as a feed-forward strategy using the LMS.

## 6. Limitations and recommendations for future research

This study was undertaken using a single assessment task within one subject of study and did not include a control group. It is acknowledged and therefore possible that some students may have attempted the AE quiz but not engaged with the AE while other students may have used the AE, but not attempted the quiz resulting in greater engagement than that recorded. We were unable to determine if students who did achieve a higher essay mark would have done so if they had not engaged with the AE. Lastly, to ascertain that students were not just copying from the AE, we would need to test this using another assessment task without AEs.

## 7. Conclusion

Quality feedback is essential for learning. Student dissatisfaction, lack of engagement with traditional approaches to feedback and growing numbers of nursing students entering programs via non-traditional pathways mean that it is essential that strategies are developed and implemented that are both engaging and effective. Just under 50% of the students enrolled in the subject used the AE. Those more likely to engage with the AE were more engaged with the LMS, female, older, and born outside Australia. However, the benefits of the exemplar were not reflected in the student's essay marks. It remains unknown, however, that if the AE had not been provided, would students have performed as well in the essay. Consideration needs to be given to strategies that will increase visibility of resources and engagement with AEs. Further investigation is required to determine why the uptake and engagement with the AE was so limited and why there was no demonstrated improvement in essay marks. This study highlights the need for a qualitative study to explore the reasons related to student engagement with the AE and students' experiences using this tool.

## Funding source

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

## Ethics approval

Granted by Western Sydney University. Approval number H10803.

## Declaration of Competing Interest

No conflict of interest has been declared by the authors.

## References

- Agius, N.M., Wilkinson, A., 2014. Students' and teachers' views of written feedback at undergraduate level: a literature review. *Nurse Educ. Today* 34 (4), 552–559.
- Andrew, S., Halcomb, E.J., Jackson, D., Peters, K., Salamonson, Y., 2010. Sessional teachers in a BN program: bridging the divide or widening the gap? *Nurse Educ. Today* 30 (5), 453–457.
- Baker, D.J., Zuvela, D., 2013. Feedforward strategies in the first-year experience of online and distributed learning environments. *Assess. Eval. High. Educ.* 38 (6), 687–697.
- Blackboard.com. (2018). Cumulative Update 1 for Blackboard Learn, 9.1 Q2 2018.
- Boud, D., Molloy, E., 2013. Rethinking models of feedback for learning: the challenge of design. *Assess. Eval. High. Educ.* 38 (6), 698–712.
- Bradley, D. (2008). Review of Australian Higher Education Final Report Retrieved from <http://www.deewr.gov.au/highereducation/review/pages/reviewofaustralianhighereducationreport.aspx>
- Buultjens, M., Robinson, P., 2011. Enhancing aspects of the higher education student experience. *J. High. Educ. Policy Manag.* 33 (4), 337–346.
- Carless, D., 2006. Differing perceptions in the feedback process. *Stud. High. Educ.* 31 (2), 219–233.
- Carless, D., Salter, D., Yang, M., Lam, J., 2011. Developing sustainable feedback practices. *Stud. High. Educ.* 36 (4), 395–407.
- Carter, R., Salamonson, Y., Ramjan, L.M., Halcomb, E., 2018. Students use of exemplars to support academic writing in higher education: an integrative review. *Nurse Educ. Today* 65, 87–93.
- Conger, D., Long, M.C., 2010. Why are men falling behind? Gender gaps in college performance and persistence. *Ann. Am. Acad. Polit. Soc. Sci.* 627 (1), 184–214.
- Crimmins, G., Nash, G., Oprescu, F., Liebergreen, M., Turley, J., Bond, R., Dayton, J., 2016. A written, reflective and dialogic strategy for assessment feedback that can enhance student/teacher relationships. *Assess. Eval. High. Educ.* 41 (1), 141–153.
- Croft, N., Dalton, A., Grant, M., 2010. Overcoming isolation in distance learning: building a learning community through time and space. *J. Educ. Built Environ.* 5 (1), 27–64.
- Devlin, M., Samarawickrema, G., 2010. The criteria of effective teaching in a changing higher education context. *High. Educ. Res. Dev.* 29 (2), 111–124.
- Di Domenico, S.I., Quitasol, M.N., Fournier, M.A., 2015. Ratings of conscientiousness from physical appearance predict undergraduate academic performance. *J. Nonverbal Behav.* 39 (4), 339–353.
- Grainger, P., Adie, L., Weir, K., 2016. Quality assurance of assessment and moderation discourses involving sessional staff. *Assess. Eval. High. Educ.* 41 (4), 548–559.
- Handley, K., Williams, L., 2011. From copying to learning: using exemplars to engage students with assessment criteria and feedback. *Assess. Eval. High. Educ.* 36 (1), 95–108.
- Hendry, G.D., Anderson, J., 2013. Helping students understand the standards of work expected in an essay: using exemplars in mathematics pre-service education classes. *Assess. Eval. High. Educ.* 38 (6), 754–768.
- Hendry, G.D., Jukic, K., 2014. Learning about the quality of work that teachers expect: students' perceptions of exemplar marking versus teacher explanation. *J. Univ. Teach. Learn. Pract.* 11 (2), 5.
- Hendry, G.D., Armstrong, S., Bromberger, N., 2012. Implementing standards-based assessment effectively: incorporating discussion of exemplars into classroom teaching. *Assess. Eval. High. Educ.* 37 (2), 149–161.
- Hendry, G.D., White, P., Herbert, C., 2016. Providing exemplar-based 'feedforward' before an assessment: the role of teacher explanation. *Act. Learn. High. Educ.* 17 (2), 99–109.
- Iacobucci, D., Posavac, S.S., Kardes, F.R., Schneider, M.J., Popovich, D.L., 2015. The median split: robust, refined, and revived. *J. Consum. Psychol.* 25 (4), 690–704.
- IBM, 2013. IBM SPSS statistics for windows, version 22.0. Armonk, NY, IBM Corp.
- Kenny, A., Kidd, T., Nankervis, K., Connell, S., 2011. Mature age students access, entry and success in nurse education: an action research study. *Contemp. Nurse* 38 (1–2), 106–118.
- Li, J., De Luca, R., 2014. Review of assessment feedback. *Stud. High. Educ.* 39 (2), 378–393. <https://doi.org/10.1080/03075079.2012.709494>.
- McKevitt, C., 2015. Questions for assessment: a guide for tutors' practice and student development. *Ir. J. Acad. Pract.* 4 (1), 9.
- Menard, S., 2018. Applied logistic regression analysis (Vol. 106). SAGE publications.
- Newlyn, D., Spencer, L., 2010. Improving student performance in interdisciplinary law unit assessment by providing annotated exemplars. *J. Australas. Law Teach. Assoc.* 3 (1), 67–75.
- Owston, R., York, D., Murtha, S., 2013. Student perceptions and achievement in a university blended learning strategic initiative. *Internet High. Educ.* 18, 38–46.
- Peters, K., Jackson, D., Andrew, S., Halcomb, E.J., Salamonson, Y., 2011. Burden versus benefit: continuing nurse academics' experiences of working with sessional teachers. *Contemp. Nurse* 38 (1–2), 35–44.
- Pitt, E., Norton, L., 2017. 'Now that's the feedback I want!' Students' reactions to feedback on graded work and what they do with it. *Assess. Eval. High. Educ.* 42 (4), 499–516.
- Quinton, S., Smallbone, T., 2010. Feeding forward: using feedback to promote student reflection and learning—a teaching model. *Innov. Educ. Teach. Int.* 47 (1), 125–135.
- Robinson, S., Pope, D., Holyoak, L., 2013. Can we meet their expectations? Experiences and perceptions of feedback in first year undergraduate students. *Assess. Eval. High. Educ.* 38 (3), 260–272.
- Robson, S., Leat, D., Wall, K., Lofthouse, R., 2012. Feedback or feed forward? Supporting Master's students through effective assessment to enhance future learning. *Cross Cultural Teaching and Learning for Home and International Students: Internationalisation of Pedagogy and Curriculum in Higher Education*.
- Rubin, M., Scevak, J., Southgate, E., Macqueen, S., Williams, P., Douglas, H., 2018. Older women, deeper learning, and greater satisfaction at university: age and gender

- predict university students' learning approach and degree satisfaction. *J. Divers. High. Educ.* 11 (1), 82.
- Sadler, D.R., 2010. Beyond feedback: developing student capability in complex appraisal. *Assess. Eval. High. Educ.* 35 (5), 535–550.
- Salamonson, Y., Andrew, S., Clauson, J., Cleary, M., Jackson, D., Jacobs, S., 2011. Linguistic diversity as sociodemographic predictor of nursing program progression and completion. *Contemp. Nurse* 38 (1–2), 84–93.
- Salamonson, Y., Ramjan, L., Lombardo, L., Lanser, L.H., Fernandez, R., Griffiths, R., 2012. Diversity and demographic heterogeneity of Australian nursing students: a closer look. *Int. Nurs. Rev.* 59 (1), 59–65.
- Scoles, J., Huxham, M., McArthur, J., 2012. No longer exempt from good practice: using exemplars to close the feedback gap for exams. *Assess. Eval. High. Educ.* 38 (6), 631–645. <https://doi.org/10.1080/02602938.2012.674485>.
- Severiens, S., Ten Dam, G., 2012. Leaving college: a gender comparison in male and female-dominated programs. *Res. High. Educ.* 53 (4), 453–470.
- Sheard, M., 2009. Hardiness commitment, gender, and age differentiate university academic performance. *Br. J. Educ. Psychol.* 79 (1), 189–204.
- Smyth, S., Houghton, C., Cooney, A., Casey, D., 2012. Students' experiences of blended learning across a range of postgraduate programmes. *Nurse Educ. Today* 32 (4), 464–468.
- Stone, C., 2008. Listening to individual voices and stories-the mature-age student experience. *Aust. J. Adult Learn.* 48 (2), 263.
- Sweeney, M.-R., Kirwan, A., Kelly, M., Corbally, M., Neill, O., Kirwan, M., Hussey, P., 2016. Transition to blended learning: experiences from the first year of our blended learning Bachelor of Nursing Studies programme. *Contemp. Nurse* 52 (5), 612–624.
- To, J., & Carless, D. (2015). Making productive use of exemplars: Peer discussion and teacher guidance for positive transfer of strategies. *Journal of Further and Higher Education*(Published online: 03 Mar 2015).
- Tomas, L., Lasen, M., Field, E., Skamp, K., 2015. Promoting online students' engagement and learning in science and sustainability preservice teacher education. *Aust. J. Teach. Educ.* 40 (11), n11.
- Vardi, I., 2013. Effectively feeding forward from one written assessment task to the next. *Assess. Eval. High. Educ.* 38 (5), 599–610.
- Wan Chik, W., Salamonson, Y., Everett, B., Ramjan, L.M., Attwood, N., Weaver, R., Davidson, P.M., 2012. Gender difference in academic performance of nursing students in a Malaysian university college. *Int. Nurs. Rev.* 59 (3), 387–393.
- Wimshurst, K., Manning, M., 2012. Feed-forward assessment, exemplars and peer marking: evidence of efficacy. *Assess. Eval. High. Educ.* 38 (4), 451–465. <https://doi.org/10.1080/02602938.2011.646236>.
- Wygal, D.E., Watty, K., Stout, D.E., 2014. Drivers of teaching effectiveness: views from accounting educator exemplars in Australia. *Acc. Educ.* 23 (4), 322–342.
- Yucel, R., Bird, F.L., Young, J., Blanksby, T., 2014. The road to self-assessment: exemplar marking before peer review develops first-year students' capacity to judge the quality of a scientific report. *Assess. Eval. High. Educ.* 39 (8), 971–986.
- Zhang, L., Zheng, Y., 2018. Feedback as an assessment for learning tool: how useful can it be? *Assess. Eval. High. Educ.* 1–13.
- Zheng, R.X., Everett, B., Glew, P., Salamonson, Y., 2014. Unravelling the differences in attrition and academic performance of international and domestic nursing students with English as an additional language. *Nurse Educ. Today* 34 (12), 1455–1459.